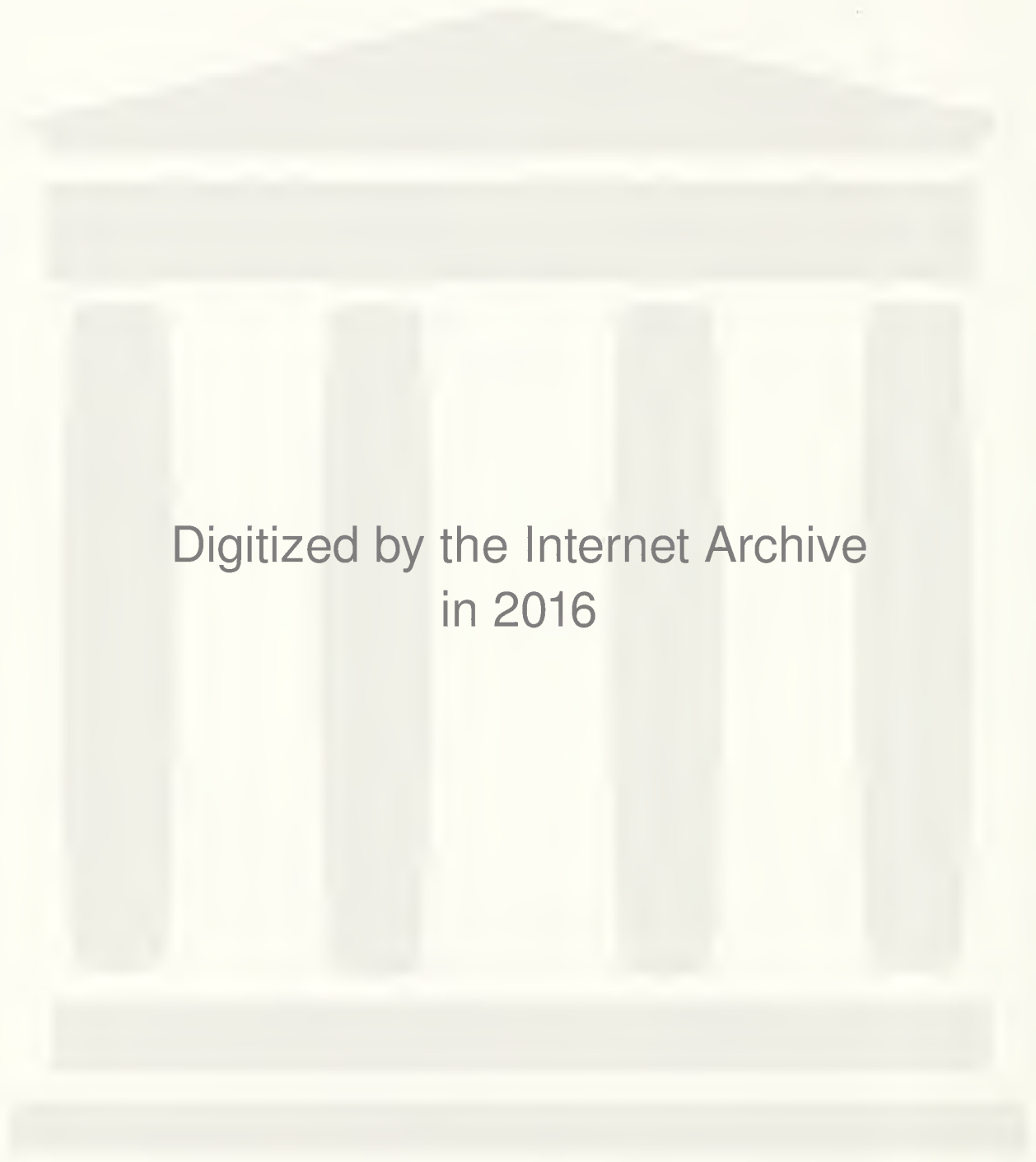




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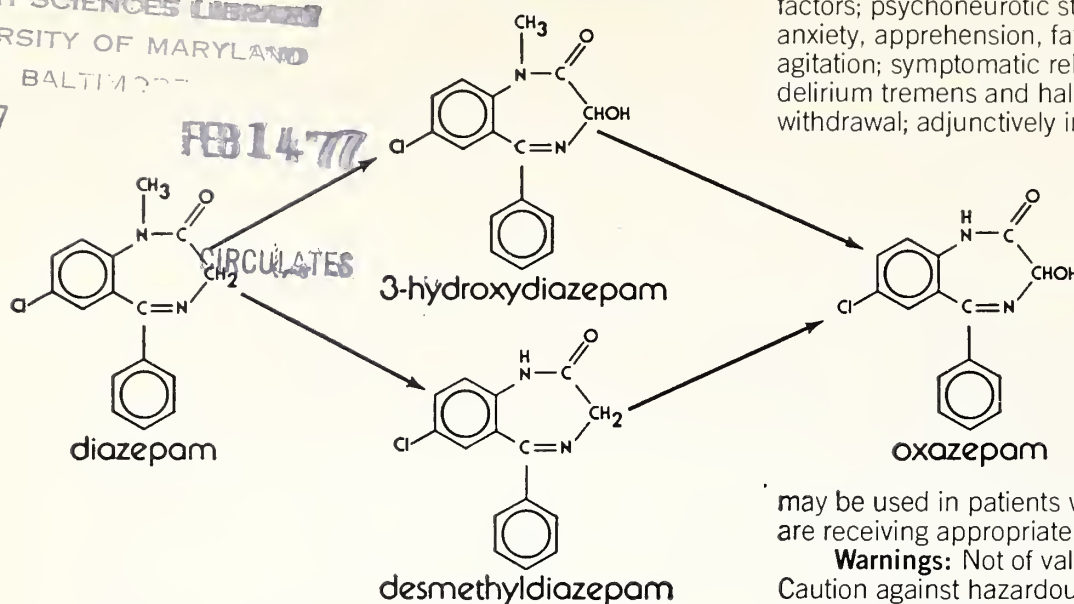
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The Crab and Its Progeny

An Editorial

JOHN B. THOMISON, M.D.

Sometimes we tend to think of cancer as an essentially modern disease, a notion which stems from several sources. One is the increasing number of people living in the older age groups which contain the "cancer years." Another is the job of cancer education done by various agencies, resulting in better diagnosis on the part of the medical profession and more awareness on the part of the public. Public attitudes have changed, too. Until relatively recently cancer was considered disgraceful, and as it was fashionable to die of tuberculosis, I have to wonder how many "phthisics" were actually lung cancer victims.

Cancer has been around for as long as there are medical records. It is mentioned prominently in the Papyrus Ebers (1500 B.C.), the most famous and complete of the Egyptian medical writings, and in the oldest remnants of Indian and Persian literature. The word "cancer" was applied to hard malignant sores by early Roman physicians because the red streaks around the tumors resembled the legs of a little crab enthusiastically hunted by Roman sportsmen.

The discouraging thing is that after nearly four millennia of recorded history of dealing with the disease that except for refinement of technique we are really little better off in our relation to it than were those early "ignorant" people. A lot of ground was lost by slavish adherence to Galen's tenet that cancer developed from concentration of black bile (A.D. 131-203) and later in the dark ages (the 13th through the 15th centuries) when surgery was proscribed by the church. But Hippocrates (460-375 B.C.) recorded a large body of knowledge from earlier times about cancer of the breast, uterus, skin, and internal organs, and distinguished between indolent ulcers (*carcinos*) and

progressive malignant tumors (*carcinoma*). He cured a carcinoma of the neck by burning it out.

Celcus (30 B.C. to A.D. 38) excised breast cancer, but advised against removing the pectoral muscles; Leonides of Alexandria, though, broke with this conservative approach and, with techniques quite similar to those in use today, cut through healthy tissues with knife and cautery in removing breast cancers.

Roswell Park commented that if someone would give him 15,000 dollars he would solve the problem of cancer in 10 years. Some 75 years and unnumbered billions of dollars later, when, as some wag remarked, "more people are living off cancer than are dying of it," we seem to be no closer to a solution than was Hippocrates.

Though the real solution will come only when the cause (or more likely causes) of cancer is found, there are some bright spots, and some of these may be found in the following four papers which with two to be published in February comprise most of a symposium entitled "Current Concepts in the Diagnosis and Treatment of Cancer," held at the 82nd Annual Meeting of the Upper Cumberland Medical Society in Red Boiling Springs last June. Early detection and more accurate diagnostic methods are making their mark, though slowly.

It is unfortunate that just when a dent is being made in the mortality rate from breast cancer, due largely to early diagnosis of small lesions, some unfortunate and rather irresponsible information, based largely on irrelevant and out-dated data, has to a considerable extent counteracted one of the principle modalities responsible for that decrease. After (or really at about the time) we addressed the problem of the safety of mammog-

raphy in our September issue, the American Cancer Society and the National Cancer Institute backed off their stand and instructed the NCI-ACS screening clinics to cease screening patients under 50 years of age. The American College of Radiology stuck to its guns, though, and the "Update on Mammography," by Burton Silbert, M.D.,

(a bonus, not a part of the symposium) accurately reflects their stand. It is also, incidentally, the privately expressed opinion of most knowledgeable people in both the ACS and the NCI.

It is no news that man is often his own worst enemy. If we are going to get ahead of Hippocrates, we'll have to shape up.

* * *

A DOCTOR'S PRAYER

O Divine Physician of souls and of bodies, Jesus our Redeemer, during Thy life on earth Thou didst cherish a special affection for those who were ill and didst heal them by a touch of Thy Almighty Hand. We who have been called to the arduous profession of healing adore Thee and recognize in Thee our Supreme Model and Support.

May our minds and our hearts and our hands be always guided by Thee, so that we may deserve the praise and the honor ascribed by the Holy Spirit to our calling.

Increase in us an awareness that in the protection and development of human beings we are in some sense co-workers with Thee and instruments of Thy mercy.

Enlighten our minds in the hazardous struggle against the countless infirmities of the body, to the end that, rightly availing ourselves of the progress of scientific knowledge, we may not remain ignorant of the causes of disease nor be misled by its symptoms, but rather, with sure judgment, may be able to prescribe the remedies established by Thy Providence.

Enlarge our hearts with Thy love, that we may behold Thee in the person of the sick, especially of those most abandoned, and may correspond with unwavering solicitude to the confidence reposed in us.

Grant that we may follow Thy example and show ourselves fatherly in compassion, sincere in giving advice, skillful in healing, averse to deception, and gentle in preparing our patients for the mystery of suffering and death. Above all make us resolute in defending Thy holy laws that safeguard the sacredness of life against the attacks of selfishness and perverted instincts.

As physicians who glory in Thy name, we promise that our activity will constantly move forward in the observance of the moral order and under the direction of its precepts.

Grant us finally, that we ourselves, through the christian conduct of our own lives and the upright exercise of our profession may deserve one day to hear from Thy lips the blissful commendation promised to those who visit Thee in the person of our infirm brethren: "Come, blessed of my Father, take possession of the kingdom prepared for you." (*Matthew 25, 34*). *Amen.*

—Pope Pius XII

Current Concepts in the Diagnosis And Treatment of Cancer

A Symposium

Recent Developments in the Diagnosis of Lymphoid Neoplasms

ROBERT D. COLLINS, M.D.

Changes in our terminology and conceptual approach to lymphoid neoplasms are being forced by recently acquired information in the field of immunology, with several pieces of information having particular relevance. Firstly, subpopulations of lymphocytes have been recognized, and techniques for identifying these normal subpopulations have been applied to lymphoid neoplasms, with enhanced specificity of diagnosis. Some lymphocytes have been shown to change cytologically from small cells with dense nuclear chromatin ("mature" lymphocytes) to very large cells capable of division and having dispersed chromatin, prominent nucleoli, and abundant cytoplasm. These large cells with the morphological features of blasts have not been recognized previously as lymphoid in type. Blastic transformation of lymphocytes has been observed *in vitro*, and presumably occurs in normal and neoplastic circumstances *in vivo*.

Lymphoid subpopulations include marrow-based precursor cells, B lymphocytes responsible for immunoglobulin production, and T lymphocytes responsible for cell mediated immunity. This is an oversimplification of the categorization of lymphoid populations, as they apparently are a very complex group of interacting cells. B lymphocyte populations may be recognized by the presence of surface or intracellular immunoglobulins, and T cells are identified by their adherence *in vitro* to sheep erythrocytes.

These techniques for lymphocyte identification are now performed at Vanderbilt University on all

lymphoid neoplasms. It is essential that a protocol for handling tissue is established in each laboratory, and that specimens are obtained appropriately by the surgeon and internists. Our protocol has been published.¹ In short, fresh specimens (lymph node, spleen, marrow filtrate, blood, body fluids) are routinely prepared for histopathology, histochemistry, immunological studies, and electron microscopy. Histopathology is used to establish the general category of lymphoid neoplasm and remains the basis of diagnosis. The neoplastic cells may then be more precisely identified by special studies (immunological markers, histochemistry, electron microscopy) in which structural and functional features of normal neoplastic cells are compared. Since most neoplasms are mixtures of neoplastic and reactive cells, it is essential that markers (histochemical, immunological, ultrastructural) be recognized in relationship to the cell identified as neoplastic by tissue sections or smears.

We have had three years of experience with this system, and, in association with Dr. Lukes at University of Southern California in Los Angeles, have studied approximately 400 cases. These studies are still preliminary, but certain conclusions seem justified:

- (1) Most lymphoid neoplasms may be categorized as to B or T characteristics using combined methodology.
- (2) B cell neoplasms are far more common than T cell neoplasms, and include such diverse clinical-pathological entities as chronic lymphocytic leukemia, multiple myeloma, and a variety of lymphomas arising from follicular centers.
- (3) T cell neoplasms, although uncommon, include important entities such as T cell

From the Department of Pathology, Vanderbilt University, School of Medicine.

From a presentation at the 82nd Annual Meeting of the Upper Cumberland Medical Society, Red Boiling Springs, June 16, 1976.

acute lymphocytic leukemia, thymic lymphoma, mycosis fungoides, and various T cell neoplasms arising from the T zone of lymph nodes.

- (4) A major group of malignant lymphomas is now recognized as arising in follicular centers of lymph nodes, a B zone area involved in plasma cell production. Follicular center cell (FCC) neoplasms include various lymphomas which have been called poorly differentiated lymphocytic lymphoma, histiocytic lymphoma (reticulum cell sarcoma), and mixed lymphocytic-histiocytic lymphomas. In contrast to Rappaport's position in the fascicle on hematopoietic tumors,² we now know that production of neoplastic follicular nodules is a specific histopathological marker of FCC neoplasms. FCC neoplasms often change from nodular to diffuse in growth pattern, or may have a diffuse growth pattern when first studied.
- (5) Large cell neoplasms, called in most laboratories histiocytic lymphoma or reticulum cell sarcoma, are usually neoplasms of transformed lymphocytes, and are most often B cell neoplasms.
- (6) True histiocytic neoplasms are very rare.
- (7) Virtually every "entity" on study with combined methodology has been shown to be heterogeneous. For example, acute lymphocytic leukemia comprises at least three patient groups, chronic lymphocytic leukemia is heterogeneous, large cell lymphomas (histiocytic lymphoma) include a variety of neoplasms with both B and T characteristics, and "poorly differentiated" lymphocytic lymphoma includes both B and T cell neoplasms with varying presentation, prognosis, and response to treatment.

Many of these observations about lymphoid neoplasms have been incorporated into a classification scheme by Lukes and myself (Table I). The basic purpose of this system is to establish immunological relevance for lymphoid neoplasms by relating the neoplasm to the presumed cell of origin. Such a system is flexible in that it allows incorporation of newly recognized entities, and more importantly it promotes interchange of information gained by studying normal, deficient, or

Table 1

Malignant Neoplasms of the Lymphoid System, in Relationship to the Presumed Cell of Origin (Modified from Lukes and Collins^{3,4})

Stem or U (Undefined) Cell Neoplasms

Acute Lymphocytic Leukemias

T Cell Neoplasms

T Cell Acute Lymphocytic Leukemia
T Cell Chronic Lymphocytic Leukemia
Thymic Lymphoma (Convolutated Lymphocytic Lymphoma)
Node Based T Cell Lymphoma (Immunoblastic Sarcomas of T Cells)
Mycosis Fungoides and Sezary Syndrome

B Cell Neoplasms

B Cell Acute Lymphocytic Leukemia
B Cell Chronic Lymphocytic Leukemia
Follicular Center Cell Lymphomas Including Burkitt's Lymphoma
B Cell Neoplasms with Plasmacytic Differentiation (Waldenstrom's Macroglobulinemia, Multiple Myeloma)
Immunoblastic Sarcomas of B Cells

Neoplasms with Cell of Origin Uncertain

Leukemic Reticulendotheliosis
Hodgkin's Disease

neoplastic cells. This system also follows the general approach for categorization of non-lymphoid neoplasms; that is, categorization by cell of origin.

The clinical significance of this new classification and the above observations is as yet unclear. Nevertheless, it seems we have underestimated the complexity of lymphoid neoplasms, and entities recently recognized have important therapeutic and prognostic differences from other members of the group in which they were included in the past. Because of the application of combined methodology at Vanderbilt, our handling of suspected neoplasms is now more appropriate to the therapeutic events following diagnosis. Specific histopathological, immunological, histochemical, and ultrastructural criteria have already been elaborated for most neoplasms¹ and our capacities for precision are much greater, particularly in the area of acute leukemia, small B cell neoplasms such as CLL and its variants, and the non-Hodgkin's lymphomas.

It seems clear that routine application of combined methodology is essential for precise diagnosis, and therefore is required for refinement of therapeutic protocols and more effective communication between referral centers. The implication for the pathologist and physician responsible for initial care of patients is that referral centers will be developed not only for therapy of certain neoplasms, but also for diagnosis. Resampling may be necessary to obtain fresh tissues for study,

or else techniques must be developed to allow preservation of some samples for purposes other than histopathology.

Summary

We are experiencing an information explosion in immunology with its attendant changes in concepts, terminology and methodology. Terms such as well differentiated or mature lymphocyte, poorly differentiated lymphocyte, histiocytic lymphoma and mixed lymphocytic-histiocytic lymphoma are now known to be inaccurate. In addition, we have learned that a variety of neoplasms with both nodular and diffuse growth characteristics arise from follicular centers and that the production of follicular nodules is a specific histopathological marker for FCC neoplasms. Relatively specific histopathological, immunological, histochemical, and ultrastructural criteria are being established for many lymphoid neoplasms, and consequently one may anticipate far greater accuracy in the

categorization of these neoplasms in the future. It seems likely that referral centers will have to undertake the sophisticated diagnostic procedures required in some of these diseases as well as serve as centers for therapy.

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Acknowledgements: This work was performed in collaboration with Dr. Robert Lukes, Dr. John Flexner, Dr. Alan Glick, Dr. Jim Leech, and Dr. Jim Waldron.

Recent Developments in the Treatment of Hemopoietic and Lymphoid Neoplasms

JOHN M. FLEXNER, M.D.

In this discussion we will cover the therapeutic aspects of some of the diseases discussed in Dr. Collins' paper. It is obvious we will not cover the group entirely. I will give you the good news, the bad news, and then the not so bad news! The hemopoietic and lymphoid neoplasms that are the potentially curable will be discussed first. This is the good news.

Acute Lymphoblastic Leukemia

This is the acute leukemia of childhood. From 30 to 50 per cent of these children are potentially "curable"—that is, they should be alive and symptom free in 5 years. The name *acute* leukemia here is a misnomer.

One may ask why we have had such success with this malignancy. First and foremost, this disease is very sensitive to present day chemother-

apy. Combinations of drugs which were only partially effective when used alone produce remissions. It was in acute lymphoblastic leukemia, especially in the treatment of the so-called sanctuary areas where conventional therapy was ineffective—the central nervous system (conventional chemotherapeutic agents do not usually cross the blood barrier), the liver, kidneys, and the gonads—that the use of such combinations, so all important today in the treatment of many types of cancers, was first tried. In these "sanctuary" areas tumor cells or leukemia cells may escape conventional treatment even with combinations of drugs. It was this break-through at St. Jude's in treating the central nervous system that primarily accounted for the better results in acute lymphoblastic leukemia.

After continuous maintenance, combined with immunosuppressive therapy, (2½ to 3 years), these children often succumbed to superimposed infections with opportunistic organisms, although

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they were in hematologic remission. At post mortem they were found to be completely free of leukemia. It was found that discontinuing maintenance therapy somewhere after 2½ to 3 years prevented their untimely death from infection. It was further postulated that when the total number of leukemic cells was reduced to somewhere around 10⁶ cells the body itself could contain and possibly further eradicate the tumor.

The above results came about by a series of empirical trials using a number of protocols. In these protocols it was ascertained that 2400 rads given in 2½ weeks seems to be an adequate dosage of prophylactic cranial irradiation when accompanied by 5 courses of intrathecal methotrexate. It was only through this type of trial and error that we realized how much it would take to eradicate the leukemia that was in the central nervous system. The same has been true for the various remission induction regimens and for maintenance therapy. These trials were started at St. Jude's and other such centers in the 1960's and continued until we found protocols that were effective.

In reviewing these protocols in children or adults who have acute lymphoblastic leukemia, the first stage is remission induction, which takes 4 to 6 weeks and presently uses 3 drugs—Prednisone, Vincristine, and Daunomycin for the most part. Following this, we do CNS prophylaxis (radiation with 2400 rads and intrathecal Methotrexate). Patients are then placed on continuous maintenance chemotherapy. We have discovered that the I.V. route is preferable for maintenance, and we are giving weekly intravenous Methotrexate with 6-Mercaptopurine by mouth daily. There is reinduction every 10 to 12 weeks, and this is continued for 2 to 3 years, followed by cessation of all therapy. Using these techniques, we have arrived at roughly a 30 to 50 per cent "cure" rate. The relapse rate for untreated central nervous system leukemia was calculated to be around 40 per cent prior to this therapy. It did little good to put these patients in hematologic remission only to have central nervous system relapse.

Hodgkin's Disease

I think without any question it was the advent of supervoltage irradiation using cobalt and/or the linear accelerators that made the initial inroad into this disease process. Of equal importance was

the discovery that in approximately 85 per cent of cases Hodgkin's disease spreads from one lymphatic region to the next contiguous region with only a few skip areas. Therefore, we treat not only involved areas with supervoltage irradiation, but the adjacent area where the disease would likely spread.

The advances in pathology, with the description of four distinctive pathological types, each with its unique clinical features, from the more benign to more malignant types, have altered therapy appreciably, therapy being more aggressive in the more malignant classifications. As in acute leukemia, the finding that drug combinations, especially the so-called MOPP protocol (Nitrogen Mustard, Vincristine, Procarbazine, and Prednisone) was more effective than any of the drugs alone, was unexpected, and may well be the most effective treatment of this disease.

Staging with staging laparotomy to accurately define the extent of the disease, evaluating the spleen, liver, and retroperitoneal and abdominal lymph nodes was found to change the original clinical impression as to the extent of the disease in some 40 per cent of cases. Dr. Henry Kaplan points out that in 1940 the 5 year survival in Hodgkin's disease was somewhere around 5 to 10 per cent. With the advent of the orthovoltage irradiation, Vera Peters was able to push this to 36 per cent, and finally with the supervoltage techniques we are up to 70 per cent or greater. The classical way one treats the disease above the diaphragm is called the mantle, from a "bishop's mantle." The cervical, axillary mediastinal, and hilar nodes are treated in this one field. Other areas such as the periaortic and the iliac nodes are treated in a so-called inverted Y field. Together they comprise total nodal irradiation. This technique treats all the areas that are classically involved by Hodgkin's disease.

Returning to staging and the 4 distinct pathologic types, the more disseminated the disease the poorer the prognosis. Also, if one examines the pathologic types going from lymphocyte predominant to lymphocyte depleted we move from a more benign to a more malignant disorder. Nodular sclerosis and lymphocyte predominant are usually localized and occur in the younger age groups. They are thus more receptive to radiation therapy. On the other hand, mixed cellularity and lymphocyte depleted Hodgkin's are more disseminated, found in older age groups, and usually require MOPP combination chemotherapy. It is

here that staging laparotomy is so important. As previously mentioned, approximately 40 per cent of cases are staged either up or down according to the results of this procedure. This in turn dramatically alters the therapeutic decisions. The overall results have been most promising, with 5 year survival well over the 70 per cent, including all stages of involvement and all pathologic varieties.

Acute Non Lymphoid Leukemia (Acute Granulocytic, Monocytic or Myelomonocytic Leukemia).

This is the bad news. The reasons we've failed here, unlike the acute leukemia of childhood, is the relative insensitivity of this cancer to contemporary therapeutic agents given singly or in combination. When chemotherapy is given, remission so often achieved in childhood leukemia is uncommon. When remissions are obtained, they tend to be short-lived, usually lasting only a number of weeks. We have not discovered newer agents to which leukemia is sensitive. To produce a remission in this disorder, one literally has to wipe out the marrow, leading to severe marrow hypoplasia. This results in pancytopenia. The white cells are gone, red cells are affected leading to profound anemia; the platelets are few and bleeding problems ensue. Isolation techniques may be utilized—the so-called “life islands”—but they are costly and of questionable overall therapeutic value. Contemporary management of this hypoplastic phase of therapy is not universally available; however, supportive treatment with platelets and white cells (when available) are assumed to be helpful. Even with the most aggressive protocols using combinations of six and seven drugs, the median survival of this leukemia is still only slightly longer than a year. Even with virtually every combination of drugs used in the classical induction, consolidation, and maintenance technique, survival has been little affected.

Transformed Cell Lymphoma (Reticulum Cell Sarcoma, Histiocytic Lymphoma)

We have been surprised that simple combination chemotherapy has produced some prolonged remissions in this disorder. The clinical presentation with wide-spread involvement outside the lymphoid system bodes ill. Surprisingly and unexpectedly, roughly 30 to 40 per cent of these patients were alive and disease-free 5 years after conventional combination therapy. Even 5 or 6

years ago when we were treating these people with routine combinations like MOPP and variations on the MOPP theme (COPP), we found that one third of such patients survived. When transformed cell lymphoma involves bone alone it likewise may run a benign course. The question that arises is—is this the same disease? In spite of contemporary therapy, the majority of patients with transformed cell lymphoma still die within two years.

When this disease evolves from the cleaved follicle center cell—that is, when there is transformation from what we used to call lymphosarcoma to reticulum cell sarcoma—the course is again very short lived. This is not unlike the blastic transformation one sees in chronic granulocytic leukemia. Regarding those patients who are “cured,” one must again ask whether this is the same disease. Is this merely a variation of Hodgkin's disease? These cases certainly act more like Hodgkin's than the usual transformed cell disease. It remains for us to study these cases and be able to predict which ones are salvageable. These cases we can continue to treat in the conventional manner. The others will require more aggressive treatment.

Thymic Lymphomas

It has been only within the last two to three years that we have learned to recognize this disorder. These patients may present without a thymic mass and are often misdiagnosed as acute lymphoblastic leukemia. If one treats patients with thymic lymphoma like patients with acute lymphoblastic leukemia, with conventional chemotherapy, they rapidly become treatment failures. They must be treated more aggressively. We presently use the most aggressive protocol we have for acute lymphoblastic leukemia. The thymic mass is also often confused with a follicle center cell lymphoma or Hodgkin's disease, especially nodular sclerosis. The thymic tumor tends to be very radiosensitive and disappears rapidly after relatively low doses of irradiation, and one is lulled into a false sense of security. Next the marrow is involved, and these patients are dead in only a few months.

The last category is the hemopoietic and lymphoid neoplasms which are easily manageable, but incurable. This includes chronic lymphocytic leukemia, chronic granulocytic leukemia, hairy cell leukemia, acute promyelocytic leukemia, cleaved cell lymphoma, and myeloma.

Multiple Myeloma

We now know that these malignant plasma cells are synthesizing immunoglobulins at a constant and predictable rate. There is a straight line relationship between the amount of serum immunoglobulin and the total size of the plasma cell tumor. One can calculate the amount (grams per cent) of IgG or IgA in the serum and predict the overall weight of tumor tissue. Myeloma cells, at the time of clinical presentation, have a very slow doubling time—about 6 months. This means myeloma is a very slow growing tumor. The myeloma cells have a prolonged resting phase, and thus do not respond well to treatment. However, as one starts to treat more aggressively, the doubling time shortens appreciably, and therapy becomes more effective. We can now measure the efficacy of our therapy by the amount of serum immunoglobulin present during treatment, and it is possible to stage myeloma according to the presence of anemia, x-ray findings in bone, the amount of immunoglobulin and Bence Jones protein produced, and overall renal function.

By determining the exact stage we can tailor our therapy to be more aggressive or benign, depending on the exact stage of involvement. In myeloma, radiation therapy is ablative to focal lytic bone lesions. This was not realized heretofore, and these lesions progressed to pathologic fractures. Myeloma patients with such a fracture become bedridden, with the added problems of infection, hypercalcemia, uremia, etc. This can be prevented with prophylactic irradiation. Newer combination chemotherapy may be more effective than previously used single drugs such as Phenyl Alanine Mustard (Alkeran) Cyclophosphamide (Cytosan) or Chlorambucil (Leukoran). In cases of hyperviscosity, plasmapheresis may produce temporary relief. Though plasmapheresis is a great deal of trouble, patients presenting with central nervous system, renal, or eye problems due to hyperviscosity may be rapidly relieved of their symptoms in a very dramatic fashion.

Cleaved Cell Follicle Center Cell Lymphomas

These lesions we have heretofore called lymphosarcomas. This tumor is very radiosensitive, yet because of its wide distribution, it is difficult to eradicate. Total body radiation was

considered to be potentially curative, but recent studies assessing the role of total body irradiation are disappointing. For local involvement, radiation therapy alone may be curative. If one has *Stage I* disease—that is, *only one* lymphatic area involved, local radiation should be used. Unfortunately, this rarely occurs. Single chemotherapeutic agents, especially alkylating agents, seem to work as effectively as combinations of drugs. There appears to be little advantage in using such combinations in this disorder. Cases that are *not* treated because they are asymptomatic and have disease confined to the lymphatic regions alone seem to survive as long as those treated with single or combination chemotherapy. Many times these patients behave like chronic lymphocytic leukemia and will live for a number of years untreated.

The average survival in this group is somewhere between four and six years. Quite a few patients have survived this long on virtually no treatment at all. They may have diffuse adenopathy, and some may have bone marrow involvement, yet untreated they may survive for extended periods of time.

It is hard to evaluate chemotherapy with this background. Many times this disease presents initially outside the lymphoid system. This is a bad prognostic sign, especially if visceral involvement is found.

An exception may be local involvement of the stomach, which may be potentially curable with surgery, radiation and/or chemotherapy. Characteristically this disorder changes from a nodular to a more diffuse involvement of lymph nodes and from the cleaved to a transformed cell in time. When this happens, conventional treatment is not very effective.

Summary

Major technological and conceptual developments have changed our classification of neoplasms of the macrophage, hematopoietic, and lymphoid systems. Analysis of treatment of patients with these neoplasms has become more complex and generally more aggressive. Dramatic changes have occurred in the prognosis and quality of life of such patients, especially those with Hodgkin's disease, acute lymphoblastic leukemia, and some of the non-Hodgkin's lymphomas. It is anticipated the other neoplasms may also respond to combination drug chemotherapy now being developed.

Current Concepts of "Minimal Breast Cancer"

DAVID L. PAGE, M.D.

Before the development of effective therapy for breast cancer, there was no need to divide the disease into categories. In the nineteenth century, once a woman was identified as having breast cancer, she was going to die of that disease. Such women usually presented with large masses in the breast and often had metastatic disease at the time of diagnosis. With the acceptance of the radical mastectomy came the realization that preoperative determination of metastasis beyond the axilla was necessary. When lung metastases were present, the mastectomy was not performed and prognosis was demonstrably poor. This clinical staging determined therapy and prognosis. Sub-categorization of breast cancer into different types is useful only if the different categories have therapeutic and/or prognostic implications. The development of 1) sensitive screening methods for asymptomatic breast carcinoma and 2) the realization that therapy other than the standard radical mastectomy might be acceptable for breast lesions with little tendency to metastasize has produced a need for more precise categorization of breast carcinomas and their progenitor lesions into groups with prognostic relevance.

Gallager and associates¹ have included under the conceptual designation "minimal breast cancer" the diagnostic terms of: lobular carcinoma in situ, intraductal carcinoma, and lobular or ductal invasive carcinoma forming a mass no greater than 0.5 cm. in diameter. I do not believe that the term "minimal breast cancer" should be strictly defined at present. We should be committed to determining precise anatomic definitions of this group of lesions including an understanding of the natural history of each lesion. Quoting from the paper of Gallager and Martin:¹

"Hyperplasia of ductal and lobular epithelium is regarded as the initial phase in the process which eventuates in carcinoma. Since hyperplasia has other possible outcomes, it has been referred to as a non-obligate form of preneoplasia. Neoplastic transforma-

tion obviously occurs within epithelium prior to invasion, but the morphological criteria for the definition of this transition point remain imprecisely defined. Minimal breast cancer, therefore, represents a stage in this continuum at which the epithelium is fully committed to neoplastic development but at which invasion either has not occurred or is little more than microscopic in extent. The situation is precisely analogous to the early phases of carcinoma of the cervix, where carcinoma in situ and micro-invasive carcinoma are well-recognized entities."

Other terms related to "minimal breast cancer" which carry different connotations and have been in use longer are "early carcinoma of the breast" and "occult carcinoma of the breast." Neither of these terms carries precisely the same implications as "minimal breast cancer" and this was, of course, the reason for introducing the new term. Currently, "early carcinoma of the breast" is used to indicate any malignant tumor confined to the breast and of small but undefined size. The term is inextricably related to the idea that carcinoma, from its inception, is destined to progress inexorably to dissemination and death of the host in the absence of effective therapeutic intervention. The term, "occult," is related to the sensitivity of method(s) of detection and not to any therapeutic or prognostic indicator, and indicates a tumor not detected by a specific technique or techniques. Thus, any "occult cancer" must be situationally defined as related to self-detection, detection by physician, detection by mammography, etc.

Histologic types of invasive breast carcinoma associated with a reduced threat of death but not currently included in the definition of "minimal breast cancer" are: adenoid cystic carcinoma, mucinous carcinoma, medullary carcinoma, tubular carcinoma and papillary carcinoma.² Each of these histologic patterns of breast carcinoma is an invasive neoplasm, is associated with more favorable prognosis, and has significantly smaller percentage of lymph node involvement at time of detection than the more common histologic types of breast carcinoma.

Considerations of "minimal breast cancer" do not include the potentially pre-cancerous changes included under the generic term "fibrocystic dis-

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ease" or "chronic mastitis."³ However, I will extend the present discussion to this even grayer zone of knowledge because of its clinical applicability. A discussion of lesions of the breast with less death-dealing potential than minimal breast cancer stresses the concept that we are dealing with a spectrum of disease which ranges from no increased risk of death from breast carcinoma through changes carrying an increased percentage risk of this eventuality. Although our knowledge of the malignant potential of fibrocystic disease in its several manifestations is severely restricted by lack of information about natural occurrence and behavior, there is good indication that patients with cysts, sclerosing adenosis, and periductal fibrosis have no increased risk of subsequent development of breast carcinoma over women who do not have such changes in their breast.⁴ However, hyperplastic lesions of breast epithelium which are less atypical than carcinoma in situ do carry an increased risk of subsequent carcinoma. This risk varies from two to five times greater probability of development of breast carcinoma.⁴ Lesions included in this group which indicate an increased risk of subsequent development of invasive carcinoma are usually called atypical ductal hyperplasia and atypical lobular hyperplasia.

Summary

Some of the stages recognizable as part of the continuum developing into metastasizing mammary carcinoma are less threatening to a patient's

life than the "classical" large and easily palpable cancer. This realization has dictated the need for development of terms to relay this concept. Eventually we would like to define categories whose natural history we can predict with respect to threat of death. As stated by McDivitt: "... with the increased clinical emphasis on the identification and treatment of these so-called minimal cancers, it behooves us to critically dissect areas of pathological certainty from those of speculation." Presently, however, we must be satisfied with the term, "minimal breast cancer," as implying the concept that breast cancer is not an all-or-none phenomenon. There are highly curable forms (or *formes-frustes*) of the disease, some of them not always resulting in metastasizing cancer even if left untreated.

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Computerized Tomography for Diagnosis of Brain Neoplasms

JOSEPH H. ALLEN, M.D.

In the remarkably short period of about 3 years, the CT scanner has become by far the most useful adjunct to neurological diagnosis. Some of it is old, and some of it very new. We still have the x-ray tube and the patient through whom we

are passing the beam, but instead of registering the resultant radiation flux passing through to the opposite side of the patient onto film, sodium iodide crystals are employed. Because these are much more sensitive than x-ray film, it is possible to gain more information with a small amount of radiation. This, then, allows more observations.

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Each point within the cranium is viewed from 180 different angles, occasionally more, and then the second new aspect appears: the computer. The computer adds up the density reading for each of more than 20,000 points in the head and prints it on a paper printout either as a number or as a dot whose density is proportionate to the cumulative observations of the corresponding area within the brain. It is now possible to discriminate between tissues which have very little difference in density, such as grey matter, white matter, blood, cerebrospinal fluid, fat, etc.—materials comprising the cranial contents, all of which are invisible on x-ray examination. Introduction of ordinary vascular contrast material, similar to that used in angiography and intravenous pyelograms, is commonly very helpful in distinguishing histologic characteristics of mass lesions, and some are invisible without it. Frequently it is appropriate to use the CT scan observations alone preoperatively without other studies.

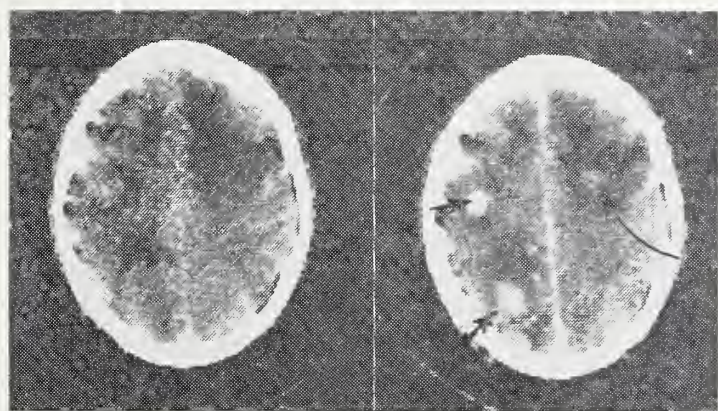


FIG. 1. Metastatic carcinoma of the testis
A. Nonenhanced high vertex film.
B. Enhanced film, same cut. At least four nodules appear.

Simple detection of lesions is consistently better than the capacities of the radioisotope scan or angiogram in almost all cases, and in addition, visualization of the anatomic structures themselves adjacent to the lesion allow for more precise localization and form a basis for decision of treatment in many cases. The prime limiting factor in diagnosis of mass lesions is size. The individual picture element is $1\frac{1}{2}$ mm. on most CT scanners, and each tomographic "slice" is routinely 1.3 cm. thick. Hence, lesions under approximately 1 cm. in size and some over this size are difficult to detect, particularly if they are both originally isodense with the surrounding brain and fail to enhance appreciably with contrast material.

Fortunately, this is a rare occurrence with any tumor.

Beyond the ability to see the tumor in relationship to the surrounding anatomy, it is also frequently possible to make a definitive diagnosis, or at least to narrow down the possibilities to a very few. A meningioma can be strongly suggested by a slightly dense lesion which is enhanced with contrast material to a high densitometric reading (over 50 Housfield units, the unit of density named for the inventor of the scanner). A mass lesion of low density resembling fat, particularly if it is away from the sellar area and fails to enhance except possibly around the margin, is likely to represent an epidermoid cyst, etc.

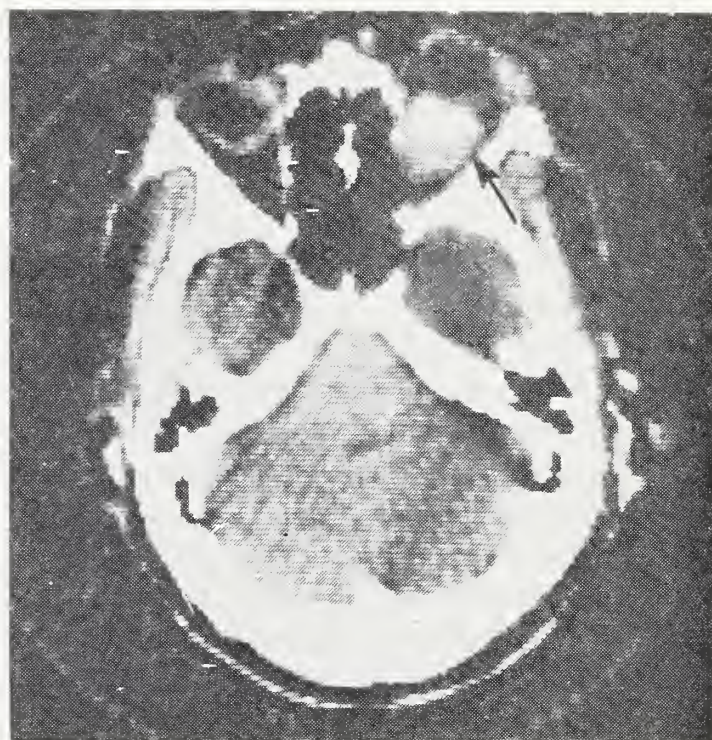


FIG. 2. Meningioma of the right orbit displacing globe anteriorly.

An extremely helpful use of CT scanning with brain neoplasms has been in the detection of recurrent tumors. This has been consistently unsatisfactory in far too many cases using angiography, radioisotope brain scans, etc. With CT a recurrent tumor can be visualized with considerable precision because most of the tumors expected to recur are enhanced with contract material. Therefore, one can compare baseline films made without contrast enhancement, which register the frequently complex changes which are purely related to surgery, with views made after intravenous contrast material is given, and clearly distinguish the enhancing tumor area from the post-operative changes. Such lesions as menin-

gliomas, gliomas, cranial nerve tumors, medulloblastomas, are all enhanced quite well.

In diagnosis of metastases, a recent survey indicated that approximately 80 percent of those detectable at autopsy were seen on the CT scan. Considering that a large number of metastatic brain lesions encountered at autopsy are under 1 cm. in size, one can expect considerable precision in diagnosis of lesions. Most surveys agree that CT is at least slightly better than the radioisotope brain scan for detection alone, and better than angiography by a considerable margin. In addition, this examination affords precise anatomic relationships and much stronger histologic clues.

Because of the excellent mathematical correlations obtainable with the CT method, exact location of brain neoplasms is much facilitated, thereby improving the accuracy of radiotherapy. Other effects such as the reduction of edema and other effects of steroids can be well demonstrated. CT scan immediately following most types of therapy will probably become routine because of the precise comparisons which can be made in detecting recurrence relatively early.

Another exciting application of CT scanning is its use in the neighboring orbit—most of the principles enunciated for brain apply here—with orbital masses. Other diagnostic modalities have been attended with perhaps even more difficulty and uncertainty than with diagnosis of brain lesions, and again the CT scanner has produced excellent results.

The newer scanners have already registered several improvements. Faster examination times,

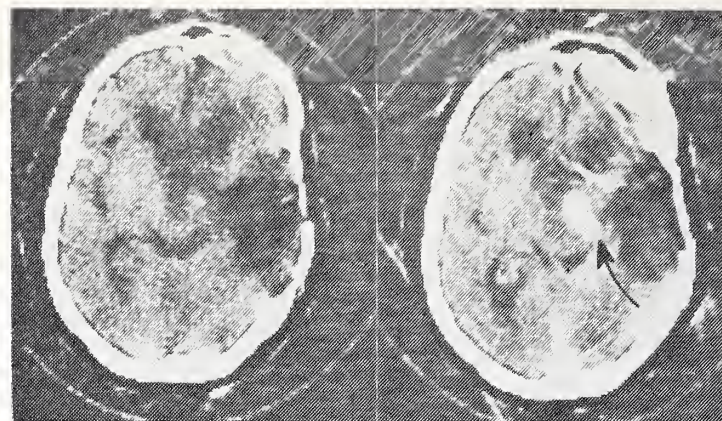


FIG. 3. Deep central recurrence of right sphenoid wing meningioma.

more flexibility in position, and elimination of bone artifacts have all been accomplished. Improvement in diagnosis of small lesions may come more slowly, in that much of this depends upon an increased amount of radiation, and radiation dosage may limit how much improvement can be obtained.

We have had no personal experience with the use of the whole body scanner, and generally the results are possibly slightly less exciting than with the head. Already, however, body scanning is well established for diagnosis of nodal masses difficult to demonstrate by any other means, and promises much information for the hepatic, renal, and pancreatic areas particularly.

It is difficult not to wax lyrical about this marvelous machine. So much information is obtained so much more safely, accurately, and conveniently; in addition, a large amount of new information has accumulated. Unlike most new modalities, at our institution the grayer the head of the clinician, the greater the enthusiasm for the use of the computerized tomographic method.

* * *

A DOCTOR'S PRAYER

I begin once more my daily work. Be thou with me, Almighty Father of Mercy, in all my efforts to heal the sick. For without Thee, man is but a helpless creature.

Grant that I may be filled with love for my art and for my fellowmen. May the thirst for gain and the desire for fame be far from my heart. For these are the enemies of Pity and the ministers of Hate. Grant that I may be able to devote myself, body and soul, to Thy children who suffer from pain. Preserve my strength that I may be able to restore the strength of the rich and the poor, the good and the bad, the friend and the foe. Let me see in the sufferer the man alone.

May there never rise in me the notion that I know enough, but give me strength and leisure and zeal to enlarge my knowledge. Our work is great, and the mind of man presses forward forever. Thou hast chosen me in Thy grace, to watch over the life and death of Thy creatures. I am about to fulfill my duties. Guide me in this immense work so that it may be of avail.

Maimonides (Abu Imram ibn Maimun) 1135-1204

Update on the Status of Mammography

BURTON SILBERT, M.D.

Recently many questions as to the efficacy and safety of mammography have been raised in the scientific literature and unfortunately to a greater extent in the lay press. All this negative publicity about mammography has as its worst effect that many women with clear indications for mammography have been so frightened that they are canceling necessary diagnostic mammograms.

The basis for most of the scare literature is an article by Dr. John Bailar in the *Annals of Internal Medicine*, in January, 1976. The article is based on the so-called BEIR Report (The Biological Effects of Ionizing Radiation) of the National Academy of Sciences National Research Council. This report includes an analysis of three sources of evidence for increased breast cancer in patients exposed to radiation.

- 1) Increased evidence of breast cancer in women exposed to the atomic bomb at Hiroshima.
- 2) Increased evidence of breast cancer in women who had repeated fluoroscopy to evaluate therapeutic pneumothorax for tuberculosis.
- 3) Increased evidence of breast cancer in women who were treated for post partum mastitis with radiation therapy.

In these instances the women were exposed to very large doses of radiation, as much as 4000 rads to the breast in the article concerning fluoroscopy. Radiation induced skin erythema was noted in some of these patients. These "estimated" radiation exposures from the above described cases were used by Dr. Bailar to extrapolate downward in a straight line method, to reach his conclusion that we may be causing more cancer than we are finding. This linear hypothesis presume that the effects of radiation exposure at high levels exist proportionately downward to zero. This is presented in Dr. Bailar's article as fact rather than hypothesis.

In Bulletin-43 of the National Council of Radiation Protection and Measurement (1975) the Council warns against using linear extrapolations from high to low dose and states that "there is such a high probability of overestimating the

actual risk as to be of only marginal value, if any, for purposes of realistic risk-benefit evaluation." The risks that Dr. Bailar raises would appear to be extremely hypothetical with little or no basis in fact. Similarly the benefits that he ascribes to mammography are based on a study begun in the early 1960's in New York City at a time when mammography was significantly less sophisticated than it is today. That study does not represent the current cancer-finding potential of mammography.

The hypothetical risks combined with the outdated "benefits" were used by Dr. Bailar and more recently Dr. Lester Breslow, Dean of the School of Public Health at UCLA, to conclude that there should be no screening of women under 50 years because "we would probably cause more breast cancer than we found." Even these men, however, state that any woman who has a clinical problem or a family history of breast cancer should have mammograms. Unfortunately this information is lost to many physicians and to most patients, especially those getting their information from the lay press.

The quantity of cancers discovered in women under the age of 50 is very significant. In the 27 NCI-ACS Breast Cancer Detection Centers, as of June, 29 percent of the cancers discovered were in patients under the age of 50. At one of the breast cancer centers in Houston 40 percent of cancers detected were in women under 50 and in only one of these women had there been detectable spread to regional nodes. The lack of regional nodes is an excellent prognostic sign for these patients. From 40 to 50 percent of all cancers diagnosed by mammography have not been detectable by any other means. In our hands, at Park View Hospital in Nashville over 25 percent of these otherwise non-detectable lesions, found by mammography, were in women under 50 years of age. Our peak incidence of non-palpable cancers was at age 50. To deny women this close to our peak age incidence access to mammography would seem to be counter-productive.

In summary, the risks involved in mammography are, at least, in part, hypothetical, and with improved equipment and technique, the mam-

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MAMMOGRAPHY/Silbert

mographic dosage to the breast has decreased and will undoubtedly continue to decrease. The benefits of mammography as currently practiced have been proven to everyone's satisfaction in women over 50 (even as a screening procedure) and in symptomatic or high risk patients in younger age groups. These facts have unfortunately been overshadowed by all the recent rhetoric.

The American College of Radiology has recently issued a statement that "mammography in asymptomatic women over age 35 promises to reduce significantly deaths from breast cancer but suggests that medical decisions must be individualized to fit the patients needs." The following guidelines were suggested.

- 1) For asymptomatic women, the baseline mammographic examination should be performed between the ages of 35 and 40.
- 2) Subsequent examinations should be performed at one-to-three year intervals unless more frequent examination is medically warranted.

- 3) After age 50, annual or other interval mammographic examinations should be performed.

Arthur Holleb, M.D. the American Cancer Society's Chief Medical Officer "advised" in a recent issue of *Cancer* that "for women between the ages of 35 and 40 mammography should be done for those who are at higher risk of developing breast cancer because they have:

- 1) Chronic cystic mastitis, with or without pain.
- 2) Lumps and thickening in the breast.
- 3) A personal history of breast cancer.
- 4) A family history of breast cancer on the maternal or paternal side.
- 5) A family history of breast cancer in sisters.
- 6) Early onset of menstruation.
- 7) No history of pregnancy.
- 8) First full term pregnancy at age 30 or older.
- 9) Breast surgery scheduled for diagnostic purposes.
- 10) Fear of breast cancer that requires the reassurance of a negative exam."

* * *

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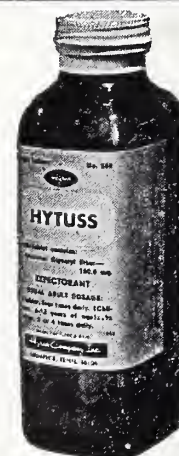
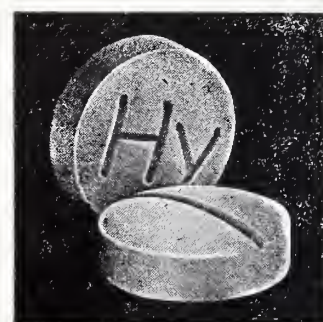
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Drug Overdose—An Increasing Medical Emergency

Over the past several months, our laboratory has performed toxicological analyses in 77 cases of suspected drug overdose. The results are different from the national experience and therefore deserve consideration. Additionally, since new modalities of treatment are available, recognition of the true state of the patient's condition becomes critical.

The analytical scheme applied to these cases is both qualitative and quantitative. The urine sample is divided into four aliquots. One of these is used for "spot" tests designed to demonstrate the presence of salicylates, phenothiazines, ethchlorvynol or bromides. The remaining three are extracted with organic solvents at different pH's as a preparatory step for analysis by thin layer chromatography and gas chromatography. When drugs or other organic toxins are demonstrated, identification is accomplished with the mass spectrometer. The blood sample is divided into two aliquots. The first is used for gas chromatographic analysis for alcohols. The second aliquot is reserved for determining blood levels for all drugs found to be present in the urine. When gastric fluid is submitted, it is analyzed in the same manner as urine.

In 19 cases (24.7 percent), no drugs could be identified using this scheme, but in the remaining 58 cases (75.3 percent), 105 drugs or alcohol were identified. Table 1 shows that about half of the positive cases were due to one drug. One patient had ingested five drugs.

Number of Drugs Identified	Number of Patients Total (Percent)
0	19 (24.7%)
1	30 (38.9%)
2	16 (20.8%)
3	5 (6.5%)
4	6 (7.8%)
5	1 (1.3%)

Table 2 lists the various drugs demonstrated and their frequency within the group. Although it is true that our experience is a selected one in

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that it may represent the most serious cases, it is interesting that only 32 percent were due to alcohol, salicylates or phenobarbital. In the national experience, these drugs account for more than half. Only twenty-eight cases (36 percent) were due to non-prescription drugs, or toxins which are easily available. The apparent extent to which prescription drugs are available for deliberate or accidental poisoning is therefore at least surprising, if not alarming. Propoxyphene is the most frequent offender in our experience.

Table 2
Drug Frequencies in Study Group

Propoxyphene	12	Acetaminophen	1
Alcohol (Ethyl)	10	Amphetamine	1
Salicylate	10	Aprobarbital	1
Phenothiazine	7	Arsenic	1
Meprobamate	6	Caffeine	1
Methaqualone	6	Chlordiazepoxide	1
Phenobarbital	6	Isopropanol	1
Amitriptyline	5	Methamphetamine	1
Butalibital	4	Methypylon	1
Diazepam	4	Morphine	1
Meperidine	4	Perphenazine	1
Phenacetin	4	Phencyclidine	1
Codeine	3	Procaine	1
Doxipen	3	Quinidine	1
Chlorpheniramine	2	Secobarbital	1
Desipramine	2		
Glutethimide	2		

In the past most cases of overdose have been managed by gastric emptying, prevention of further absorption by instilling oil, and support of cardiovascular and respiratory function. A few cases could be treated by direct antagonists of the toxin or by membrane hemodialysis. A new modality which promises to be applicable to virtually all cases of serious overdosage is charcoal dialysis. In this procedure, the patient's blood is continuously perfused through a small canister of charcoal particles. Toxins as well as normal low molecular weight metabolites are absorbed from the plasma. In the hands of experienced dialysis physicians, the procedure is effective and reasonably safe. Charcoal dialysis requires careful monitoring of serum chemistries and the formed elements of the blood since hypoglycemia, hypocalcemia, leukopenia and thrombocytopenia will occur, but are manageable in expert hands.

Joseph J. Sannella, M.D.
Medical Director

Gallium Scanning in the Detection and Localization of Inflammatory Lesions

Gallium-67 is a cyclotron-produced radioactive isotope of stable gallium-71, a metal with chemical properties similar to aluminum and indium. It emits three gamma rays suitable for scanning, and since 1969 has been variously employed as a localizing tracer in scanning for both primary and metastatic tumor sites.^{1,2} More recently, in 1972 and 1973, gallium became recognized as a scanning agent useful in the detection and localization of occult inflammatory lesion.^{3,4} Further clinical experience with this agent over the ensuing four years indicates that this latter application probably comprises its more important clinical use.

Case Report

The patient is a 25-year-old caucasian woman who in 1973 was shown to have Crohn's disease involving the terminal ileum and right colon. She was treated medically with antibiotics and steroids. She suffered acute exacerbations in the summer and fall of 1974 which responded to the medical regimen. In 1976, she became pregnant and at term was admitted to the hospital in November, where she delivered a normal child. Following delivery she began to suffer severe pain in the right lower quadrant of the abdomen. She remained afebrile. Physical examination revealed diffuse tenderness in the right lower quadrant, but localizing findings, such as point rebound tenderness, were not present. Repeated X-ray examinations including KUB, cholecystogram, upper gastrointestinal and small bowel series, and barium enema were normal. The latter studies indicated apparent remission of the findings of granulomatous colitis and ileitis which had been seen in previous examinations. Over the first 20 days of the patient's hospital course pain in the right lower quadrant persisted despite intensive therapy with antibiotics and steroids. However, she remained afebrile. On the twentieth and twenty-first hospital days, after a bout of intense right lower quadrant pain, ultrasound and gallium scans of the abdomen were performed.

The ultrasound examination demonstrated a 4 cm. rounded, well-circumscribed sonolucent lesion 2 to 3 cm to the right of the midline at the level of the umbilicus (figure 1). This finding was strongly suggestive of a cystic mass, rather than a solid lesion. The gallium scan demonstrated a well-defined rounded lesion of intense tracer localization near the lower tip of the right lobe of the liver, corresponding in location to the cystic mass noted in the ultrasound study (figure 2).

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, Tenn. 37203.

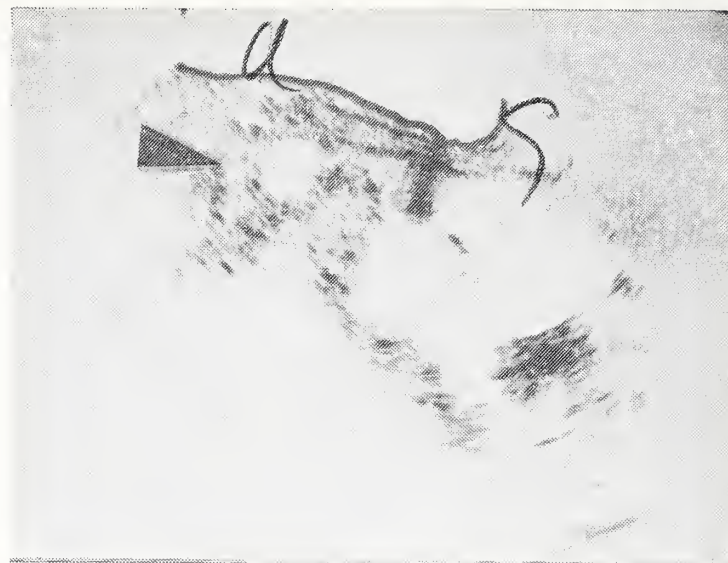


FIG. 1. Ultrasound scan showing rounded, well circumscribed sonolucent lesion to the right of the midline at the level of the umbilicus.

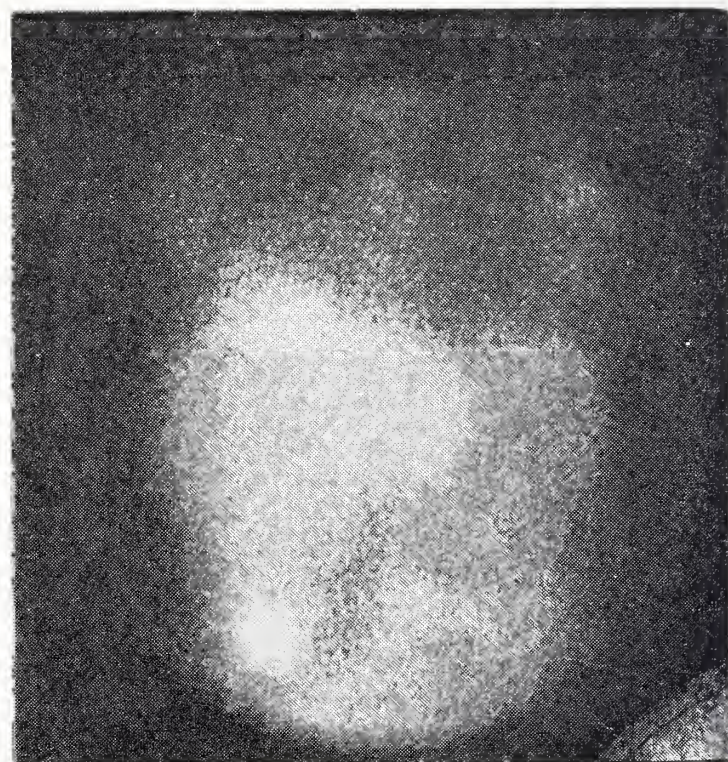


FIG. 2. Gallium-67 scan showing well defined, rounded lesion near the tip of the right lobe of the liver.

This confirmed the probable inflammatory nature of the lesion. Exploratory laparotomy revealed an inflammatory mass attached to the under surface of the liver, incorporating the terminal ileum, and abutting against the right colon. A right colectomy and resection of the terminal ileum with removal of the mass were performed. When opened, the mass emitted purulent liquid material. Bacterial cultures grew staphylococcus aureus.

Discussion

The above case report amply illustrates the facility of the gallium-67 scan in localizing and confirming the presence of an intra-abdominal abscess in the face of nondiagnostic, if not confusing, clinical findings masked by antibiotic and steroid therapy. Despite the presence of a large lesion, the patient remained afebrile and free of localizing signs throughout her presurgical hospital course. Though the ultarsound examination, a good, widely performed screening test for abdominal, pelvic, or retroperitoneal abscess, initially delineated a cavitary lesion in this patient, it was the gallium scan that confirmed its inflammatory nature, demonstrating the very complementary relationship between these two procedures. In addition, the gallium scan is capable of detecting solid, occult inflammatory lesions in which actual abscess cavities have not yet developed. Among a group of twelve septic patients scanned with gallium-67, Littenberg et al detected inflammatory lesions in eleven.⁴ In all eleven patients, the lesion delineated by the scan subsequently proved to be the source of the sepsis.

The only negative scan occurred in a patient with typhoid fever and hepatitis, with no focal source of sepsis. Among the eleven patients, six had inflammatory lesions with abscess cavities (pancreatic bed, splenic bed, liver, retrosternal space, and two wound abscesses) and five had diffuse inflammatory processes unassociated with actual abscess formation (infected retrohepatic hematoma, pyelonephrytis, cystitis, sinusitis, and cholecystitis). The latter five lesions could probably not have been accurately diagnosed solely by ultrasound examination.

Harold J. De Blanc, Jr., M.D.

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* * *

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Guanethidine

Guanethidine (Ismelin®) is an effective antihypertensive agent whose site of action is the peripheral sympathetic nervous system. Guanethidine is actively transported from the plasma into peripheral nerve endings by the same process which recirculates norepinephrine back into the nerve ending. Here guanethidine binds to norepinephrine storage granules and results in a release of nervous tissue norepinephrine. Furthermore, guanethidine is able to block release of catecholamines as they are produced by nervous stimulation. The selective peripheral sympathetic blockade produced by guanethidine is responsible not only for its antihypertensive effects but also for the vast majority of the undesirable side effects of the drug. Guanethidine blocks the normal sympathetic reflexes and results in hypotension by decreasing venous return to the heart and cardiac output and by blunting responsiveness of the resistance and capacitance blood vessels to sympathetic stimuli. Total peripheral resistance is slightly decreased in the supine position and does not rise with the assumption of upright posture. For this reason, there is an exaggeration of the hypotensive effects of guanethidine in the upright position.

The sympathetic blockade produced by guanethidine may commonly cause expansion of the plasma volume. Patients with cardiac disease who require increased sympathetic tone for cardiac function may have a worsening of their cardiac condition during treatment with a sympathetic blocker like guanethidine. The retention of sodium and expansion of plasma volume associated with guanethidine may result in the development of tolerance to its antihypertensive effects.

The long plasma half-life of guanethidine (5 days) makes it possible to use the drug on a once daily dosing basis. Because of this long half-life, repeated daily administration of the same dose will lead to accumulation of drug in the body. When therapy is initiated or when the daily dosage is changed, 3 half-lives or approxi-

mately 15 days will be necessary to achieve a steady state of plasma drug levels, and therefore the antihypertensive effects of the drug may be quite delayed.

For this reason a method has been developed by which adequate blood levels for therapeutic results can be reached quickly through a technique called guanethidine loading. In this technique, large loading dose of guanethidine are administered orally on a 3 time a day basis until blood pressure control is obtained. When the standing diastolic blood pressure has fallen to an acceptable level, a maintenance dose of guanethidine is calculated based on the total administered dose. This technique requires that the patient be hospitalized so the blood pressure can be carefully followed. Sodium restriction or a diuretic is necessary during loading to prevent sodium and water retention that could limit the hypotensive effects of the drug and thereby mask the degree of sympathetic blockade present.

Table 1
Suggested Loading Regimen for Hospitalized Patients*

Day	Dose (Mg)			Cumulative Dose (Mg) ⁺
	6 am	12m	6 pm	
1	80	25	35	140
2	40	50	75	285
3	90	110	125	570
4	150	150	150	940

*The drug is given at intervals of 6 hr. omitting the night-time dose; pressures in supine and upright positions are checked before each dose; loading is stopped at the point of the control of upright blood pressure; the maintenance dose will be 1/7 of the total loading dose.

⁺Corrected for loss of 1/7 of previous day's total.

Table 1 indicates a typical guanethidine loading regimen for a hospitalized patient. An initial loading dose of 80 mg is used. This dose is chosen because it has not produced excessive hypotension in the vast majority of patients and is equivalent to the body stores resulting from a daily maintenance dose of 10 mg. Subsequent doses are calculated to increase the body stores by approximately 30 percent. The nighttime dose of guanethidine is omitted since observation of the

From the Division of Clinical Pharmacology, Hypertension Center, Vanderbilt University Hospital, Nashville, Tenn. 37232.

patient during these hours may be somewhat more limited than during the daytime. When the desired fall in blood pressure is reached, the maintenance dose of guanethidine is calculated as 1/7 of the amount of drug loaded into the body pool. Patients have required 125-525 mg loading dose over a 2-3 day period of time. It must be stressed, however, that there is no standard regimen for guanethidine loading and the load must be continued until the desired blood pressure response is obtained. The guanethidine loading technique is useful in situations in which blood pressure can be safely lowered over a 1-3 day period of time and in situations where acute antihypertensive therapy used in the treatment of hypertensive emergencies is being discontinued and chronic maintenance therapy established.

Since guanethidine is capable of a profound sympathetic blockade, its use has classically been reserved for treatment of patients with severe hypertension. Recent experience with the drug, however, indicates that it may play an important role in the treatment of the mild to moderate hypertensive patient who does not respond initially to diuretic alone. Since it lacks central nervous system symptoms of sedation and depression and since it has a long plasma half-life, guanethidine has certain very desirable characteristics. It should be stressed that for long term therapy, guanethidine should always be used in combination with a diuretic to minimize sodium retention and maximize its efficiency. Guanethidine may also be used in combination with vasodilators in order to bring about additional blood pressure control in the supine position.

There are patients who do not achieve adequate antihypertensive effect with guanethidine initially or who become refractory to the antihypertensive effect of guanethidine after an initial good response. In such cases, it is often difficult to determine the cause of this resistance to therapy. Observing the patient for the presence or absence of normal sympathetic reflexes will permit an assessment as to whether guanethidine is producing its pharmacologic effects on the peripheral sympathetic nervous system. If sympathetic reflexes are absent, then the agent is not producing adequate antihypertensive response and the most common causes of this apparent resistance to guanethidine are expansion of the plasma volume and increased circulating catecholamines. Aggressive diuretic management and attempts at dietary sodium restriction will result in return of blood

pressure control in the majority of these patients. The remaining patients should respond to the addition of vasodilator therapy either as the specific alpha adrenergic antagonist phenoxybenzamine or as a non-specific vasodilators hydralazine and prazosin. On the other hand, if sympathetic reflexes are present then guanethidine is not producing its pharmacologic effect. Careful consideration of compliance problems, drug interactions as outlined below, and inadequate dosage of guanethidine are all considerations at this point.

The simplest way to evaluate the presence or absence of sympathetic reflexes is to observe the patient's pulse on assumption of the upright posture. While a lack of change impulses is not helpful, the presence of an increased heart rate upon assumption of the upright posture indicates it is highly unlikely that baroreceptor reflexes are blocked by guanethidine.

Since guanethidine enters the peripheral adrenergic nerve through the norepinephrine pump mechanisms, agents which compete for this transport mechanism can prevent the entrance of guanethidine into the neuron and hence block its antihypertensive action. The tricyclic antidepressants and chlorpromazine are examples of drugs which competitively block the uptake of guanethidine into the adrenergic neuron. Patients whose blood pressure elevation has previously been controlled by guanethidine will lose control over a period of several days during treatment with these agents. In the presence of pre-treatment of patients with tricyclic antidepressants guanethidine will be ineffective as an antihypertensive agent.

Ephedrine can also block the antihypertensive effects of guanethidine through a similar mechanism. Amphetamines, whose use in the treatment of hypertensive patients is to be deplored, also blocks the uptake of guanethidine into the adrenergic neuron, but in addition it also stimulates the release of guanethidine from the peripheral sympathetic neuron. These interactions have potentially serious clinical consequences in patients with severe hypertension, and therefore should be considered carefully whenever guanethidine is used.

Since guanethidine causes a hypersensitivity to infused or circulating catecholamines, and may in fact stimulate the release of catecholamines from nerve endings, it should not be used in patients who have pheochromocytoma. Guanethidine should also not be used for one week

following cessation of monoamine oxydase inhibitor therapy.

The undesirable side effects of guanethidine are directly related to its antihypertensive actions. When side effects occur, they are directly related to excessive sympathetic blockade or to a relative increase in parasympathetic activity. These undesirable side effects are most commonly seen in patients with severe hypertension who require complete sympathetic blockade for blood pressure control. The most commonly noted symptom associated with guanethidine therapy is orthostatic dizziness, weakness, or syncope usually occurring in the morning. It is as accentuated in hot weather with exercise or during ingestion of alcohol-containing beverages. Each of these conditions produces vasodilatation which cannot be compensated for in the sympathetically blocked patient. On the other hand, unopposed parasympathetic activity can result in bradycardia, diarrhea, and delayed or retrograded ejaculation. Rarely, exacerbation of symptoms of asthma may occur in patients who have asthma and hypertension. This does not represent, however, an absolute contraindication to the use of guanethidine in the hypertensive patient with asthma.

Guanethidine does have a notable lack of side effects related to the central nervous system and drug related allergies, and rashes, fever, and organ

toxicity are essentially unknown despite 15 years of its use as a prescription agent. This lack of toxicity and its extreme effectiveness makes guanethidine an important antihypertensive therapeutic agent.

RAYMOND L. WOOSLEY, M.D., Ph.D.

ALAN S. NIES, M.D.

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* * *

The Oath of Hippocrates

I swear by Apollo, the physician, and Aesculapius and health and all-heal and all the Gods and Goddesses that, according to my ability and judgment, I will keep this oath and stipulation:

TO RECKON him who taught me this art equally dear to me as my parents, to share my substance with him and relieve his necessities if required; to regard his offspring as on the same footing with my own brothers, and to teach them this art if they should wish to learn it, without fee or stipulation, and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the art to my own sons and to those of my teachers, and to disciples bound by a stipulation and oath, according to the law of medicine, but to none others.

I WILL ALLOW that method of treatment which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel; furthermore, I will not give to a woman an instrument to produce abortion.

WITH PURITY AND WITH HOLINESS I will pass my life and practice my art. I will not cut a person who is suffering from a stone, but will leave this to be done by practitioners of this work. Into whatever houses I enter I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption; and further from the seduction of females or males, bond or free.

WHATEVER, in connection with my professional practice, or not in connection with it, I may see or hear in the lives of men which ought not to be spoken abroad I will not divulge. as reckoning that all such should be kept secret.

WHILE I CONTINUE to keep this oath unviolated may it be granted to me to enjoy life and the practice of the art, respected by all men at all times but should I trespass and violate this oath, may the reverse be my lot.

TMA

X-ray of the month

The radiograph below is an arteriogram on a 56-year-old female patient with hypertension. What is your diagnosis?

1. Fibromuscular hyperplasia of the renal artery
2. Atherosclerotic disease with stenosis of the right renal artery
3. Traumatic renal artery aneurysms
4. Normal variation of the renal artery secondary to injection of the contrast media.



Answer:

Fibromuscular hyperplasia of the renal artery

Discussion:

Fibromuscular hyperplasia of the renal artery has emerged as a lesion of major importance in causing renal vascular hypertension. This lesion is of interest because it is a potentially curable lesion which occurs predominantly in young women. Pathologically, fibromuscular hyperplasia is unassociated with primary atheromatous disease and differs from atheromatous disease in that it

usually involves the distal portion of the main renal artery. Atheromatous disease involves the proximal portion of the renal artery at its take-off from the aorta. The lesion of the fibromuscular hyperplasia is marked by proliferation of fibrous tissue and smooth muscle fibers which are frequently associated with degeneration of elastic fibers, the end result being narrowing of the renal arterial lumen. The abnormal section of the artery may be localized, or the lesion may involve a considerable length of the renal artery. The involved arterial segment may be composed of areas of atrophy and proliferation of the wall of the artery giving the wall the beaded appearance radiographically. Roentgenologic diagnosis is made by the typical angiographic appearance which as seen in the radiogram presented demonstrates the beaded appearance of the renal artery. The so called string of beads.

The other diagnostic possibilities mentioned in the above differential are not correct for the following reasons. The atheromatous changes of the renal artery occur at the take-off from the aorta, and generally do not involve the distal two-thirds of the renal artery. This entity involves the renal artery locally and does not extend for long segments of the renal artery as is seen in fibromuscular hyperplasia.

Traumatic aneurysms of the renal artery are generally localized, producing a single aneurysm, and preceded by a strong history of trauma to the flank.

Normal appearance of the renal artery following injection of contrast media certainly presents a phenomenon referred to as "corrugated or standing waves" of the renal artery. This appearance can be more confusing to the angiographer, but generally presents in a more equal and symmetrical wavy appearance to the arterial wall. This phenomenon can be eliminated from a source of possible error in diagnosis by the injection of one percent lidocaine into the renal artery and noticing the disappearance of the "standing wave."

Leif Ekelund, M.D.

A. James Gerlock, Jr., M.D.

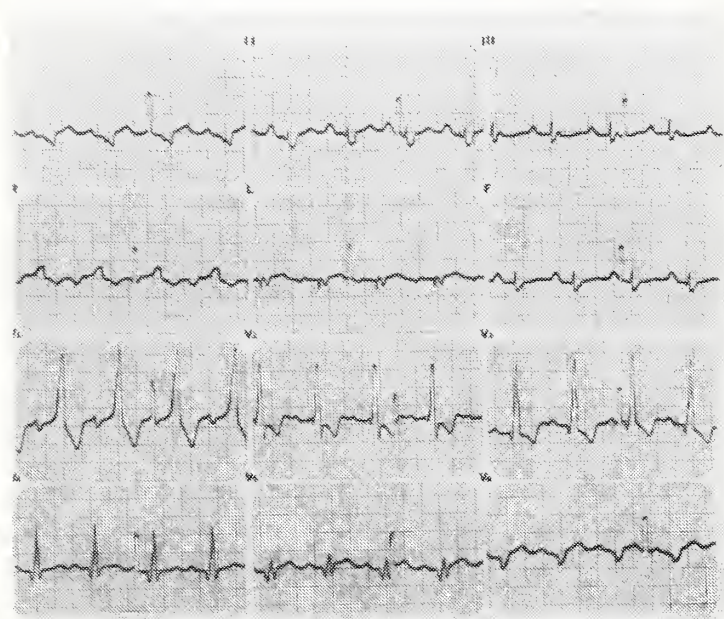
From the Department of Radiology, Vanderbilt University Hospital, Nashville, Tenn. 37232.

TMA EKG of the month

HISTORY

M.P., a 44 year old office worker had her first myocardial infarction at age 38. The infarction was complicated by congestive heart failure requiring chronic digitalis and diuretic therapy. She had a second infarction in November, 1974, followed by a worsening of her congestive failure. In January, 1974 she had cardiac catheterization which demonstrated in large poorly contracting left ventricle with an end diastolic pressure of 28 mm Hg (Normal= ≤ 12) and moderate mitral regurgitation. The left anterior descending coronary artery was totally occluded, the circumflex artery had diffuse

Her electrocardiogram is illustrated:



From the Department of Cardiology, Saint Thomas Hospital, Nashville, Tenn. 37205.

disease and the right coronary artery had an 80% obstruction. In February, 1975 she had coronary artery bypass surgery in an attempt to salvage her remaining myocardium. Since operation she had no recurrence of chest pain or infarction, but developed severe right ventricular failure. In November, 1976 she was re-hospitalized with ascites, peripheral edema, marked hepatomegaly and an SGOT of 1200 units (N=8-42).

The 12 lead EKG shows normal sinus rhythm with first degree AV block and a PR interval of 0.24 sec. The P wave duration is 0.11 sec in lead II, 3 mm in height and has a significant terminal negative deflection in lead V₁, indicating both left and right atrial enlargement.

The QRS duration is 0.14 sec and the terminal forces are both rightward and anterior with a large R' in V₁ indicating right bundle branch block. Q waves are present in leads I, AVL, and V₃ to V₆ which is compatible with an extensive anterior-lateral and superior infarction. The R' in lead V₁ is quite large (20 mm) and may indicate right ventricular enlargement, even in the presence of the right bundle branch block. In this case right ventricular enlargement was certainly present since she had extensive right ventricular failure and chronic passive congestion of the liver.

Final electrocardiographic diagnosis:

1. Anterior-lateral and superior myocardial infarction
2. Right bundle branch block
3. Right ventricular enlargement
4. Left and right atrial enlargement
5. First degree A-V block

Rand T. Frederiksen, M.D.

* * *



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Renal Disease Program

Advances in technology and in the treatment of patients suffering from chronic renal disease have made possible the return of these people to socially productive lives, but the costs of these advances have made it impossible for most patients to pay for their own health care. The goal of the Renal Disease Program of the Tennessee Department of Public Health is to assist in purchasing life-saving care and treatment for those who are unable to pay for such services on a continuing basis.

The Renal Disease Program was implemented by the Department of Public Health on July 1, 1971, to assist in paying for treatment of patients and in helping equip specialized dialysis centers for their care. To provide medical care for the first fiscal year, \$250,000 in state funds were appropriated by the Legislature, and the program admitted 48 patients. New patients have been added each successive year until the program is paying for some or all of the care of 192 patients, making the annual appropriation requirement over \$654,000.

Proposing standards for determining eligibility for care and treatment under this program and assisting in the development and expansion of programs for the care of people suffering from chronic renal disease is the role of the Renal Disease Advisory Committee. The eleven member committee is composed of representatives from hospitals and medical schools which establish dialysis centers, voluntary agencies interested in kidney disease, local public health agencies, physicians, and the general public. The committee has appointed two subcommittees, the Candidate Evaluation and Selection Subcommittee and the Patient Care Subcommittee.

The Candidate Evaluation and Selection Subcommittee determines if a patient is medically indigent and eligible for the program using the financial data provided by the patient on the application.

Medical eligibility is determined by the Renal Center physicians and/or the Patient Care Subcommittee. Prerequisites include presence of end-stage renal failure which requires dialysis and,

preferably, eventual kidney transplant; a sufficient degree of understanding and motivation to assure that the patient can and will participate in continuing hemodialysis; absence of other life-threatening disease and systemic disease. (Patients should not be disabled by disorders such as irreversible and progressive cardiac disease, liver diseases, neurological disease, chronic pulmonary disease, organic gastro-intestinal diseases and malignancy. Patients with systemic disorders such as diabetes mellitus, active lupus erythematosus, scleroderma, amyloidosis, polyarteritis nodosa, and those who appear to be free of malignancy for a reasonable period of time may be considered on an individual basis by the Patient Care Subcommittee after approval by the Candidate Evaluation and Selection Subcommittee. The particular phase of the disease and extent of the physiological and functional disability are key evaluation factors.)

A study was made in August of the 172 patients on the program to develop a profile of the "average" Renal Disease Program patient. The average grade level of completed education was 8.76 years. This compares with the average grade level for Tennessee citizens of 10.6 years. There were 93 Blacks, 78 Caucasians, and 1 Oriental on the program at the time of the survey. And there were the same number of males and females—86 of each.

Age Distribution of Patients

Age	Male	Female	Totals
0- 9	0	0	0
10-14	0	1	1
15-19	4	6	10
20-24	12	7	19
25-29	13	6	19
30-34	9	11	20
35-39	9	7	16
40-44	8	9	17
45-49	10	14	24
50-54	7	11	18
55-59	9	10	19
60-64	4	3	7
65+	1	1	2

The most frequent primary disease leading to end-stage renal failure was glomerulonephritis. Of the sample, 61 patients had had this infection. Hypertension was the second most common pri-

Continued on page 33



tennessee department of mental health & mental retardation

Institutional Racism Research for Change

Recent organizational goals of the Department of Mental Health and Mental Retardation emphasize a need for improved services to clients, more community alternatives to institutionalization, more participation generally from the community for upgrading services, improvement of the community mental health center system, and examination of affirmative action successes with a focus on racial parity.

In supporting all current departmental goals State Mental Health and Mental Retardation Commissioner Dr. Harold W. Jordan places much emphasis on reaching the goal of racial parity and equality of treatment.

The TDMHMR was recently granted funds from the Center for Minority Group Mental Health Programs of the National Institute of Mental Health to conduct a comprehensive and systematic investigation of organizational barriers to equality. Commissioner Jordan and Linda Douglass, Ph.D. are co-principal investigators in the project, and a staff of six program analysts and a secretary have been hired to conduct the study.

The specific objective of the study is to identify and eliminate organizational barriers to equality within the Department. The focus of the project is on organization rather than personal racism. Institutional racism refers to the unequal opportunities rooted in the system of an organization which do not have primary dependence on individual attitudes or prejudice but rather are a by-product of organizational practices and procedures which provide advantages and privileges to the majority. This includes placing institutional control predominantly with the majority.

To assist in achieving the objective of the study, four specific aims have been established. The first is to develop a useful operational definition of institutional racism. The second aim is to determine whether it exists and, if so, the extent to which it exists within the Department. The third aim is to isolate the conditions which lead to institutional racism, and the fourth aim is to assist the facilities to determine corrective actions, and then

to evaluate for the Department the proposed corrective action plan.

In the first year of the project, a pilot study is underway which encompasses the Central Office and four of the eight facilities, representing both urban-rural environments and psychiatric-developmental facilities.

Three types of data are being collected from the facilities and Central Office. Technology requiring the collection of critical incidents will be the primary research approach. A sample of more than five percent of the total number of employees has been selected from each facility and Central Office.

Forty-five minute interviews are scheduled with each sample member individually. During this time the interviewee is provided with an explanation of the nature of the study and responses to any questions which he or she might have. Employees, of course, may decline to participate in the project.

Standardized questions are used to elicit "critical" incidents or instances of either positive or negative behaviors which produce or prevent practices that discriminate inadvertently against the minority.

These instances will then be grouped into homogenous categories which will form the basis of a behavioral checklist. This checklist will be administered anonymously to 100 percent of the employees in the four facilities involved and in Central Office. The results of the survey will generate the initial descriptive data for each of these facilities and Central Office. These descriptions or profiles will serve as the major focus of the study. The diagnostic aspect of the profiles should indicate areas where change is needed.

Supplementary to the major source of data are interviews which involve managers in the facilities. These interviews are designed to collect information about the informal structures, procedures, or policies of the Department. An average of fifteen managers, with a majority of first line supervisors, has been selected from each facility and Central Office. In addition, all employees in decision-making positions in the Personnel Divisions are

being interviewed. Finally the facilities' formal or public policies are being examined to ascertain whether the institution has concerned itself with institutional racism.

Because the research involves people, federal guidelines require that an Institutional Review Board be created. The Board is composed of persons with varying backgrounds and sufficient qualifications to insure safeguarding the rights and welfare of the individuals interviewed.

At present, the staff is proceeding with data collection to build checklists for use in the facilities and Central Office. The next step will be the actual development of a checklist or diagnostic tool which will be used to determine the extent and types of behaviors existing within the Department which contributes to or reduces institutional racism. The checklist will be administered to a 100 percent sample of the facilities involved and Central Office.

In the second year, the same approach, with

* * *

Department of Public Health

Continued from page 31

mary problem with 24 patients deriving renal disease from it. Geographically, Shelby County had the largest number of state renal patients with 64. Davidson County had 15 and Hamilton County had 14.

Application to the Renal Disease Program is a two-step procedure. 1) The applicant must complete the Renal Disease Program application forms which can be secured from the social worker in the Renal Center or affiliated Dialysis Unit or from the Tennessee Department of Public Health. 2) The applicant or the private physician must secure an appointment for a comprehensive medical examination from one of the three Renal Centers located at Baptist Hospital, Memphis; City of Memphis Hospital, Memphis; and Vanderbilt University Hospital, Nashville. Staff for the nephrologist or in the Renal Center must check and/or complete all application forms for the patient, after which applications will be sent to the Tennessee Department of Public Health for review and approval by the Candidate Evaluation and Selection Subcommittee and/or Patient Care Subcommittee.

After a patient is accepted on the Renal Disease Program, virtually all medical services related to the condition will be covered either in part or totally by the program. Medicare, under which most patients are eligible, will pay 80

modifications based on experience from the pilot study, will be applied to a larger and more general sample from the Department. It is anticipated that by the end of the second year, the development of significant policy changes and recommendations will be made by the Department to prevent and correct conditions of institutional racism. More extensive studies are scheduled for the third year.

This Minority Research Project of TDMHMR is unique not only to Tennessee but also to the Southeast Region. In addition, it represents a new approach to understanding and reducing institutional impediments to equality. It guarantees a significant contribution, not only to the Department but also to the current knowledge available in the field; thus, it has national significance. No single project could hold more social significance for minority groups than that of gaining equality by developing creative change in response to institutional racism.

percent of the medical expenses after three months. The state Renal Disease Program, which makes payment only after other third party sources, will pick up the rest of the patient's bill. If a patient has no other source of financial coverage, the program will pay 100 percent for all covered services. The items and services currently covered include in-center dialysis treatments, drugs, laboratory fees, and professional fees. Rental of kidney machines, water service for kidney machines, supplies, transplants, and other related medical services are also covered.

The Tennessee Department of Public Health works in close cooperation with the Renal Centers and Dialysis Units to ensure that approved patients receive quality medical care and that the patients' physical well-being is given top priority. The Department is anxious and willing to help all patients and their physicians by answering questions or discussing problems regarding medical care and financial assistance. For information, contact:

William H. Utt, Dr. P. H., Director
Arthur J. Viehman, M.D., Medical Director
Jerry G. Marable, Program Coordinator
Chronic Renal Disease Program
Division of Categorical Medical Assistance
R. S. Gass State Office Building
Ben Allen Road
Nashville, TN 37216
Phone (615) 741-7201

HILL CREST HOSPITAL

*For Intensive Treatment
of Psychiatric Disorders*

MEDICAL DIRECTOR:
James K. Ward, M.D.

ADMINISTRATOR:
Robert V. Sanders

HILL CREST HOSPITAL

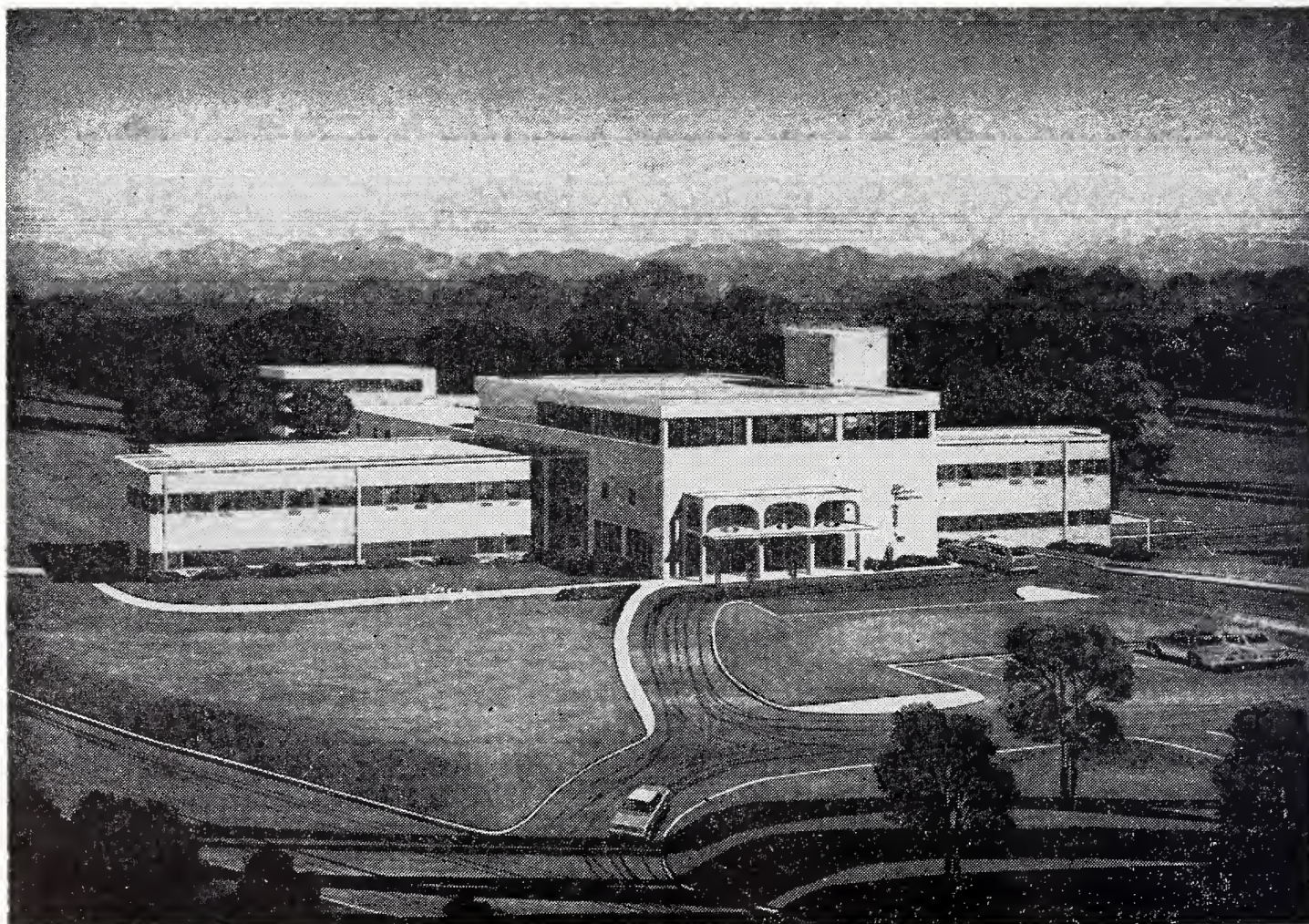
HILL CREST FOUNDATION, INC.
6869 Fifth Avenue South
Birmingham, Alabama 35212
PHONE: 205-836-7201

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.



National Health Insurance



C. GORDON PEERMAN, JR.

There are many physicians in this country who are convinced that the American Medical Association and organized medicine should introduce a comprehensive health care bill in the next Congress. This conviction resulted in the major debate of the December AMA Clinical Convention and meeting of the House of Delegates in Philadelphia.

Although most physicians would like to see this issue fade away, the politicians do not seem inclined to let it die, even if our citizens feel that other issues are more important today. Is the interest of the public as well as the medical profession best served by opposing any comprehensive health insurance or National Health Insurance legislation?

The cost of the health care package in organized labor's contracts with industry has become so oppressive that many industrialists might be willing to let the Federal Government take the problem off their hands. The great expense of bureaucratic administration of many Federally funded health programs is growing and becoming an increasing financial burden for the country.

With this climate developing in our nation, the House of Delegates of the AMA voted to continue the policy of developing legislation based on the fifteen points previously approved by the House. This approach to National Health Insurance could avoid the socialistic health care programs that have been developed in Europe. The program in Great Britain is a bureaucratic nightmare. Medical care is often delayed and of poor quality. Many doctors in England are fleeing the system and immigrating to other countries including the United States.

Included in the fifteen guidelines for National Health Insurance are:

1. Minimal Federal involvement in administration.
2. No Social Security tax for financing.
3. No Social Security administration of insurance programs.
4. The use of private insurance on risk and underwriting basis.
5. Cost and quality controls.
6. Each state should have jurisdiction in licensure of physicians and regulation of insurance.

With a bill based on these principles, it is possible that we could avoid a terrible legislative mistake in the Congress. In proposing and working for the adoption of legislation that will preserve freedom for patients to choose their physicians, we will have kept the public trust. Physicians would also retain a reasonable fee for service with minimal Federal bureaucratic interference.

This course allows the medical profession to remain in the political arena today fighting for those principles we believe will provide the best possible medical care for this nation and provide much needed leadership for the free world.

The TMA solicits the support of all of the physicians in our state and their patients for the AMA bill to be introduced in the 95th Congress.

Sincerely,

C. Gordon Peerman, Jr., M.D.

PRESIDENT

**president's
page**

Journal

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JANUARY, 1977

editorials

Thoughts for a New Year

As press time began to crowd in on me, I remarked to one of my associates that I had not written a New Year's editorial. Not only that, I didn't have one in mind. His reply was, "why not dig out one of your old ones and reprint it?" I guess it isn't plagiarism if it involves only one's own writing, but I couldn't quite bring myself to do it. I did begin to look back through some of the old ones though, and my most vivid impression was, "How cloudy is our crystal ball." It takes so little to upset the balance.

The word for medicine right now is "pessimistic," and on the face of it it's hard to see how it could be otherwise, and yet judging by past ex-

perience, you never know. You never *can* know. Some devotees of astrology live in useless inactivity because their stars never seem to produce the "right day," and others are goaded into destructive precipitate action. One good (or bad) tornado, earthquake, hurricane, flood or epidemic, not to mention all the uncertainties of civilization or lack of it, can bring our world tumbling down around our ears. Less commonly but just as unpredictably, windfalls can elevate us to new heights. Even the most predictable paths often collapse beneath us.

There is a lot of speculation about what is going to happen to us in our various roles under the new administration. Some things do appear rather certain, but the only really certain of them are death and taxes, and they, like most other things, are generalities. The specifics are harder to come by, and knowing them would likely complicate and not simplify our existence.

Uniquely among civilizations the ancient Jews were forbidden to consult arcane sources about the future. They frequently disobeyed, with disastrous results. Whether we read tea-leaves, sheep livers, palms, knots on heads, or stock market bulletins and forecasts, or if we consult the stars or the weather maps, our information is liable to come out garbled and be subject to gross misinterpretation. Although it is frequently possible to make valid projections based on current trends, it often takes very little to erase the "if."

I have, in retrospect, written some fairly pessimistic editorials, based on what I could see. But though the retrospectoscope is brightly illuminated, our future vision is exceedingly myopic, and we need to remember it. We need to remember the words of Robert Burns that "the best laid plans of mice and men gang aft aglae." I do not wish to be understood to be against planning. But for your peace of mind in the new year, I give you the words of Jesus: "Which one of you can live a few years more by worrying about it? . . . Do not worry about tomorrow; it will have enough worries of its own. There is no need to add to the troubles each day brings." (Matthew 6:27, 34, *Today's English Version*). And the words of the prophet Isaiah, "Thou wilt keep him in perfect peace whose mind is stayed on Thee." (Isaiah 26:3)

J.B.T.

Deja Vu in Phillie

The City of Brotherly Love, which is often anything but, and which is the butt of many W. C.

Fields jokes (often, not to say usually, justified), became the scene last month of a minor revolt as the AMA House of Delegates went into deliberations at its 30th Annual Clinical Session. Bitter cold weather and the Legionnaires' disease kept the crowds away in droves, so that the biggest and best of all AMA education programs suffered a sinking spell, but things were hot enough across the river, where the cry was, "Down with National Health Insurance, and a pox on HR 6222" (the AMA sponsored NHI bill). The reference committee hearings strung out into late afternoon, and the House spent a lot of time retracing its six month old steps from Dallas, but in the end the House again sustained the position of the Board of Trustees that it is absolutely necessary that AMA have a national health insurance bill in the 95th Congress, and approved the report of the Reference Committee, which commented that "your Reference Committee is impressed with the number of occasions on which this house has reviewed and approved the substantive matter either contained in HR 6222 or on which it is based."

I hate to accuse colleagues of being either obdurate or thick-headed (or both) and I do it only because I can identify with them, having on occasion been accused of it myself, probably with justification. But in this instance why having an NHI bill in Congress necessarily means support of the concept of mandatory universal NHI escapes me.

I personally bow to no man in my opposition to mandatory universal NHI, and the Board occupies the same position. But it is the candid opinion of many members of the Congress that we have thus far escaped it only because the AMA has taken a positive position, instead of a negative one which unfortunately has come to be associated in the public mind with medicine generally, organized or otherwise.

I shall not undertake to discuss further the bill or the deliberations, as I am sure the latter will be widely publicized, and the first already has been. But I do wish to quote once again from the report of the Reference Committee:

"Not only is the Committee impressed with the preponderance of testimony in support of HR 6222 but also with the substantive merit of that testimony. Moreover, in the opinion of the Committee, this bill embodies the principles approved by this House and represents a viable mechanism to advance the Association's views

on this subject. The Committee concurs with the views of the Council on Medical Service, the Council on Legislation, the Board of Trustees and the many speakers who testified at the hearing in support of HR 6222."

An obdurate reactionary stand will do nothing to stem the tide of public opinion, and can only have the effect of closing off organized medicine from any possibility of input into an area which so vitally affects our future.

J.B.T.

Irresponsibility in High Places

Conversation overhead in a restaurant:

"Well, he was just acting like a politician."

"Why do all politicians have to be dishonest?"

"I guess maybe they think that's the only way to get what they want."

"But does it have to be that way?"

"I don't know."

While I certainly would not want to tar every politician with that brush, irresponsibility and self-serving are distressing and dangerous wherever they occur, and when they are present in government it is doubly so because it touches so many lives and because so often there seems to be little recourse. It is probably why the term "politician" conjurs up in people's minds the idea of self-service, as opposed to "statesman" (in short supply these days).

The particular case in point is the series of incidents of political interference in the administration at Central and Western State Hospitals, the latest of which resulted in the resignation and the subsequent immediate firing of Dr. Exter F. Bell as Superintendent of Central State, by which Governor Blanton and his administration have shown themselves to be totally callous to the needs of the mental patients of the state.

Thomas O. Smith, chairman of the Central State Board of Trust, is quoted as saying he had warned Bell when he took the job as superintendent there were political aspects to it.

"He was fully warned that this was the situation in Tennessee," Smith said. "He took the job right on the heels of the Ninow mess. I told him it was just part of the job. The statute says the superintendent serves at the pleasure of the Commissioner who serves at the pleasure of the Governor."

If that is what the statute says, and it is, then steps *must* be taken to make it say otherwise. Unless it does, it will soon be impossible to obtain proper leadership in our mental institu-

tions, if it is not already. Our mental health program may already have suffered irreparable harm from the irresponsibility of the government. It is time for this job to be removed from politics, because doctors for the most part do not make good politicians.

J.B.T.



Acupuncture Defended

To the Editor:

It is with unusual interest that I read the November issue of the Journal of the TMA. I refer specifically to the articles on acupuncture.

I have used acupuncture daily in my medical practice for almost three years and find it to be remarkably effective and safe. I had the opportunity of learning the procedure while practicing on the West Coast early in 1974 and have utilized it extensively since that time. I have enthusiastically observed its progressive acceptance in this country and have done what I could to help.

Many researchers in California, New York, and other states are conceding that it does indeed have a place in the armamentarium of the American physician. Some of these men, by the way, are getting close to explaining the mechanism of action.

The article by Dr. Paul S. Crane, "Complications of Acupuncture," which is based upon one man's observation, is quite an argument for the use of sterile technique. Indeed this very argument which he is using against acupuncture could have been used against surgery a generation ago before aseptic technique or antibiotics. To cast aspersion, however, against an entire modality of treatment because of such complications in the hands of some practitioners ignorant of sterile technique is erroneous.

In our clinic in Los Angeles and in my office in Nashville, actual complications are rare, and results of therapy are very rewarding.

O. Jerry Maynard, M.D.
Parkview Tower - Suite 1218
210 25th Avenue North
Nashville, Tenn. 37203

Author Request

To the Editor:

For a biography of Dr. Alton Ochsner of Ochsner Clinic, New Orleans, opinions, evaluations, anecdotes, reminiscences, photos are needed. Photos will be carefully handled and returned. All material gratefully received by

Ira Harkey, PhD
401 Metairie Road, 706
Metairie, Louisiana 70005



ALFORD, JOSEPH W., JR., age 80. Died November 14, 1976. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

BARNES, LINDA STALEY, age 41. Died October 27, 1976. Graduate of the University of Miami. Member of Marshall County Medical Society.

CLEMMER, HUBERT PYLANT, SR., age 69. Died November 6, 1976. Graduate of Tulane University. Member of Consolidated Medical Assembly of West Tennessee.

CURREY, DOYLE EISON, age 66. Died November 28, 1976. Graduate of the University of Tennessee School of Medicine. Member of Chattanooga-Hamilton County Medical Society.

HUNTER, JOHN DAVIDSON, age 37. Died October 29, 1976. Graduate of Louisiana State University. Member of Northwest Tennessee Academy of Medicine.

KILLEBREW, JOSEPH B., age 75. Died November 24, 1976. Graduate of Vanderbilt University School of Medicine. Former member of Chattanooga-Hamilton County Medical Society.

WILEY, WILLIAM A., age 73. Died December 1, 1976. Graduate of the University of Virginia. Member of Sullivan-Johnson County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BRADLEY COUNTY MEDICAL SOCIETY

Harry B. Johnston, M.D., Cleveland
Edwin G. Swart, Jr., M.D., Cleveland
Mervin A. Wade, M.D., Cleveland

CAMPBELL COUNTY MEDICAL SOCIETY

Thomas L. Cohen, M.D., LaFollette

CHATTANOOGA-HAMILTON COUNTY

Morris Z. Effron, M.D., Chattanooga

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

John Q. Baker, M.D., Bolivar
Glen Barnett, M.D., Jackson
Russell Blanton, M.D., Trenton
Alvin Summar, M.D., Jackson
George Thomas, M.D., Jackson
Richard Larry Williams, M.D., Jackson
Stephen K. Wilson, M.D., Jackson

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

James F. Allbritten, M.D., Memphis

John R. Austin, M.D., Memphis
 Ajit Kumar Biswas, M.D., Memphis
 Howard J. Chuang, M.D., Memphis
 Joseph N. Fisher, Jr., M.D., Memphis
 John H. Gardner, M.D., Memphis
 Harvey C. Harmon, M.D., Memphis
 James M. Holbert, Jr., M.D., Memphis
 Bradford W. Kincheloe, M.D., Memphis
 Robert M. Kisabeth, M.D., Memphis
 Morris A. Lebovitz, M.D., Memphis
 Richard K. F. Leung, M.D., Memphis
 Frank A. McGrew III, M.D., Memphis
 Douglas M. MacGaw, M.D., Memphis
 Elizabeth H. Macintyre, M.D., Memphis
 Michael R. Marshall, M.D., Memphis
 William F. Matchett, M.D., Memphis
 William F. Milam, M.D., Memphis
 James F. Nash, M.D., Memphis
 William L. Russo, M.D., Memphis
 Jack M. Schneider, M.D., Memphis
 William P. Stepp, Jr., M.D., Memphis
 Erika F. Trapp, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

Frederick S. Arnold, M.D., Nashville
 William A. Gardner, Jr., M.D., Nashville
 Aubrey J. Hough, Jr., M.D., Nashville
 Montra M. Kanok, M.D., Nashville
 Thomas E. Mason, M.D., Nashville
 Henry P. Pendergrass, M.D., Nashville
 Jonathan M. Schwartz, M.D., Nashville
 Earl E. Vastbinder, M.D., Nashville

SUMNER COUNTY MEDICAL SOCIETY

Ralph H. Ruckle, M.D., Portland

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY

Charles P. Cole, M.D., Johnson City
 David M. Freeman, M.D., Johnson City
 John T. Smedley, M.D., Johnson City

programs and news of medical societies

Nashville Academy of Medicine

A recommendation of the Board of Directors to increase the annual dues for Active and Provisional members from \$100 to \$150 was approved by 88% of the membership present and voting at the November 9 meeting. The increase will become effective January 1, 1977.

Mr. Raymond Schklar of Nashville has been named Assistant Executive Director of the Nashville Academy of Medicine. He will assume the new position on January 1, 1977.

According to Dr. James Hays, incoming President of the Academy, Schklar will be primarily responsible for administering the numerous activities and special projects of some 10 Academy committees. He will also represent the association in the areas of governmental relations and legislative affairs.



Raymond Schklar

A native of Williamson County, Schklar, 24, is married to the former Susan Mitchell of Nashville. He is an honor graduate of the University of Tennessee at Knoxville with a B.A. degree in political science and has completed course work toward a Master's degree in public administration at the University of Tennessee at Nashville. For the past two years, he has served as an administrator-investigator with the U. S. Civil Service Commission.

medical news in tennessee

ETSU Medical Dean Appointed

Dr. D. P. Culp, president of East Tennessee State University, announced on Dec. 7 the appointment of Dr. Jack E. Mobley, Sioux Falls, S.D., as Dean of the University's College of Medicine. Dr. Mobley comes to ETSU from the University of South Dakota School of Medicine, where he has been associate dean for clinical sciences.

From 1972-74, Dr. Mobley was professor and chairman of the department of urology at Rush-

Presbyterian-St. Luke's Medical Center in Chicago, and from 1966-72, was head of the division of urology at the University of Arkansas Medical Center.

After undergraduate education at Arkansas A & M College and the University of Arkansas, Dr. Mobley received his doctor of medicine degree from Vanderbilt Medical School and a master of science in surgery from Mayo Foundation and University of Minnesota Graduate School. He has also done graduate study in the Tulane University School of Medicine. He is certified by the American Board of Surgery and the American Board of Urology.

national news

THIS MONTH IN WASHINGTON (From the AMA's Office in Washington, D.C.) Guilt By Innuendo

The American Medical Association has assailed the government's release of the names of 995 physicians who last year received \$100,000 or more from the Medicaid program, terming the action "nothing less than an attempt at guilt by innuendo."

"It simply makes a tough practice tougher for the thousands of dedicated, honest ghetto physicians," declared James Sammons, M.D., Executive Vice President of the AMA.

A total of 2,533 Medicaid providers, including dentists, pharmacies and laboratories as well as physicians, was released by the Social and Rehabilitation Service (SRS) of the Health, Education and Welfare Department. The Agency said the list was requested under the Freedom of Information Act by news media and others. Under the Act, according to the Agency, the information must be provided.

"The fact that these medical providers received the stated amounts from the Medicaid program should not be construed as any evidence of wrongdoing, nor do amounts listed necessarily represent 'earnings' or 'profits,'" SRS spokesman said, adding that it had no information as to the size of staffs employed by the individual doctors, or the number of separate offices they may maintain.

In addition to the 995 physicians, there were 312 dentists, 127 labs, and 1,099 pharmacies on the list released by HEW. The physicians in-

cluded 542 individual practices and 453 group practices.

States with the largest numbers of physicians on the list were California, 300; Illinois, 144; New York, 113; Michigan, 83; Texas, 62; Ohio, 41; and New Jersey, 28. The names and addresses of all physicians, including those in the group practices, were contained in the massive, inch-thick document.

AMA's Dr. Sammons asked, "Does HEW think these doctors are guilty of fraud? Then let HEW say so. Does HEW think they are guilty of violation of ethics? Then let them give us the names and we will investigate."

"The AMA favors prosecution to the fullest extent of the law of any person—physician or otherwise—who defrauds patients or the government," Dr. Sammons said, "But we are tired of doctors being made the whippingboy by publicity-seeking bureaucrats and politicians. If they want to clean up Medicaid and Medicare let them go after the Medicaid Mill and nursing home operators who prosper in every major city with political protection. That's the root of the corruption and the fraud and abuse.

"This releasing of names is nothing less than an attempt at guilt by innuendo. It simply makes a tough practice tougher for the thousands of dedicated, honest ghetto physicians. If HEW wants to drive medical care out of the ghetto completely, it has certainly hit upon a highly effective method."

Patient Package Inserts

Patient package inserts for almost all drugs, one of the major demands of the consumer movement, with their attending problems and concerns were discussed at a two-day symposium here recently. The session was sponsored by the AMA, the Drug Information Association, the Food and Drug Administration and the Pharmaceutical Manufacturers Association.

The patient insert should not be confused with the package insert. Years ago Congress approved the requirements for the package insert for prescription drugs, apparently in the mistaken belief much of this information would get to the patient. Most of it went to pharmacists; none was required to be given to patients.

There were hearings in the last Congress on legislation introduced in House and Senate aimed at providing patients, with certain exceptions,

insert information on the prescription drugs they receive.

FDA Commissioner Alexander Schmidt, M.D., told the symposium the consumer has a right to know about the medicine he is taking. "There is increasing evidence that a high proportion of Americans either do not understand the prescription instructions or do not follow them," Dr. Schmidt said. He contended there is a lack of effective communication often between physician and patient on drug information.

The information supplied patients must not be as detailed as the warnings required in advertising. This would be "an invitation to hypochondria," said Dr. Schmidt. Rather the information should be in plain English, factual, and explain why the drug is being taken, major side-effects to watch out for, and when to report reactions to the physician, according to the FDA Chief.

William Barclay, M.D., AMA Group Vice President for Scientific Publications, said carefully prepared information about selected drugs is desirable and could be of service to patients, physicians and pharmacists. However, Dr. Barclay cautioned that there is a clear danger that the disclosure could be so alarming as to discourage use of drugs that are vitally needed.

One of the major questions to be answered is how the insert would be distributed. "Obviously, the physician would rather not have the responsibility of stocking in his office perhaps thousands of brochures," he said.

Of even greater importance, is the liability and other factors involved when physicians in certain cases for the sake of their patients either want no insert provided or want to suggest doses or other information that might run counter to the insert's material.

Dr. Barclay noted that labelling has had little effect on cigarette smoking. He also noted that one of the most powerful drugs available with all sorts of adverse reactions and addiction potential would not be covered by the patient insert—alcohol.

John Adams, Ph.D., Vice President of the PMA, said non-prescription drugs contain far more patient informational material than the stronger prescription drugs. However, the patient package insert could cause severe strain on the physician-patient relationship, he said. "An adequate explanation of the risks and benefits might be impossible in a brief description."

Joseph Onek, Counsel for the Center for Law and Social Policy, said physicians don't have the time to tell their patients all they need to know about drugs. Patients forget away. He suggested that a priority list be made up for the inserts, starting with all drugs used in pregnancy, then tranquilizers and barbiturates.

Confidentiality of Records

The Social Security Administration is asking the public for help on how much information, including medical data, should be disclosed from Social Security records.

"Social Security needs to change its regulation to make it conform with the Privacy Act, the Freedom of Information Act, and the new government in the Sunshine Act," a spokesman said.

"An important issue underlying these laws is the basic conflict between the public's right to know and the right of privacy of the people whose records are kept by Social Security," SSA Chief James Cardwell said. "We will need to resolve that conflict in our regulation, and we want the public's help."

Social Security said the revised regulation must address the basic information about an individual collected for purposes of administering the Social Security Act vs. interchange of such information with state or federal agencies to further efficient administration of other benefit programs, or to meet other governmental needs—a further concern is the public's right to know.

What personal information (including the Social Security Number) should be disclosed by SSA without the consent of the individual in the following situations:

- (a) for entitlement or potential entitlement to other local/state/federal benefits or service;
- (b) for investigative or prosecution purposes.

Among other questions posed were whether there should be limitations on disclosure of medical information to third parties and special procedures for disclosing medical information to the subject individual, and to make public fees paid to individual physicians, incorporated individual physicians, and other providers of medical services.

Grantee Appeals

The Public Health Service has changed the informal appeals system available to its grantees.

Now all discretionary project-grant programs will be eligible to informally appeal certain adverse, post-award decisions made by PHS Grants Administrators. Previously, only specifically designated programs had access to the informal appeals system.

The final arbiter of disputes between HEW and grantees is the Departmental Grant Appeals Board. Grantees wishing to formally appeal disputed determinations to the Board must first exhaust any informal appeal procedures established by HEW's principal operating components.

Uniformed Services Dean Resigns

Anthony Curreri, M.D., has resigned as dean of the fledgling Uniformed Services University of Health Sciences to return to the University of Wisconsin as Evan Helfaer Professor of Surgery. Dr. Curreri, who has served two years with the military medical academy in Bethesda, Maryland, also has taken a position with the Veterans Administration's Middleton Memorial Hospital in Madison.

A search is on for a replacement for Dr. Curreri. Meantime, David Packard, Chairman of the military medical school's Board of Regents, will act as President. The post is one of the most attractive in government for a physician, paying \$70,000 annually, third highest pay in federal government for anyone.

The school opened its first class this year.

Institute of Medicine Meets in D.C.

That medicine has had little to do with the improvement in mankind's health over the past several hundred years was the attention getting gist of the opening address theme of the annual meeting of the Institute of Medicine here.

There was some sharp disagreement with the speech by Thomas McKeown, M.D., Professor of Medicine at the University of Birmingham, England, but Dr. McKeown insisted that "human health is determined mainly by way of life," not medical advances.

According to Dr. McKeown, the decline of mortality and growth of population started at the end of the 1600's when farmers began a more scientific and diligent approach to producing crops. "This increase in food supplies between the end of the 17th century and the mid-1800's coincided with a substantial reduction of mortality from infectious diseases—and, it is suggested, was the main reason for it."

Powerfully supporting this progress was improved hygiene affecting the quality of food and water in the late 1800's, Dr. McKeown said. "The contribution of immunization and therapy has been recent and, over the whole period, relatively small."

The English physician said "that what is true for other living organisms is also true for man. Namely that health depends essentially on control of environmental influences, including those, which by his own behavior, the individual makes for himself."

Some institute members contended that Dr. McKeown was shortchanging the effect that immunizations and the post-1935 development of antibiotics, etc., have had on health. The speaker conceded that these have had a significant impact, but he said that in viewing huge population masses the new treatments do not loom large statistically in comparison with the general improvements in living conditions.

An analysis of the current burden of various illnesses in the U.S. based on use of medical services and facilities, loss of life and work time, was presented by Dorothy P. Rice, Director of the National Center for Health Statistics.

The rank order of categories of disease according to burden were: mental illness and handicap, respiratory diseases, ischaemic heart disease, bone and joint disease, accidents and suicide, and neoplasms.

The annual meeting concentrated on the state of treatment of schizophrenia, hypertension, and smoking and disease.

Pilots Need Stricter Physicals

"Airplane pilots need stricter physician examinations because medically unfit airmen continue to endanger themselves and the public," claims the General Accounting Office (GAO) in a report to Congress.

Most of the criticism was directed at private pilot screening but the GAO said that even commercial pilot tests are often less thorough than those for military pilots, air traffic controllers and foreign civilian pilots.

Better medical examination requirements would be especially helpful in singling out pilots with heart trouble, alcoholism and high blood pressure, the GAO said.

The report suggested there are some 23,000 private pilots "who may represent potential safety problems, including about 12,500 with records

of driving (autos) while intoxicated and 200 with physical disabilities which prevent them from driving an automobile," said the GAO.

The GAO, an investigative agency for Congress, proposed that the Federal Aviation Administration on withdrawal or denial of drivers' licenses for pilots.

Most scheduled U.S. airlines have tougher medical checks than required by federal law, but there is no requirement that the airlines notify the government when pilots with FAA medical certificates flunk their airline physicals, according to the GAO.

The GAO report and the recent publication of several books questioning airline safety and pilot reliability may lead to Congressional hearings in 1977.

Consumer Health Information Act

Moving to carry out a new federal law, HEW has made appointments designed to give higher priority to health education, health promotion, and disease prevention activities.

The new law, the National Consumer Health Information and Promotion Act, was approved by the Congress last summer.

Assistant Secretary for Health, Theodore Cooper, M.D., announced that Roger O. Egeberg, M.D., Special Assistant to the Secretary for Health Policy, will serve as his special assistant for health education.

A staff office—the Office of Health Information and Health Promotion—will be set up in the office of the Assistant Secretary for Health. Named as interim director of that office was Ms. Jane Fullarton.

Dr. Egeberg will have overall responsibility for health education policy and for developing better working relationships with outside organizations engaged in health education activities.

The new law directs the office of health information and health promotion to:

- **coordinate health information;
- **coordinate such activities with the private sector;
- **facilitate coordination with other federal agencies, and professional organizations, citizens organizations, and public interest groups;
- **and, coordinate the operation of a national clearinghouse on health information, promotion, and prevention activities.

Ms. Fullarton is currently the director of the

Division of Health Research, Office of Policy Development and Planning, Office of the Assistant Secretary for Health.

Hospital Bed Decrease Urged

A National Academy of Sciences panel has called for a 10 percent decrease in the ratio of hospital beds to population. Claiming that a surplus of short term general care beds is contributing to higher medical costs. The panel said a national health planning goal should be to reduce the present ratio of 4.4 beds per 1,000 persons to 4.0 by 1981.

This would be accomplished by curtailing hospital construction and closing down some existing hospital facilities.

Panel member John D. Thompson, M.S., of Yale University estimates that about 50,000 hospital beds which are now either in use or slated for construction would have to be eliminated. He and the panel stressed the need for waiting periods for elective surgery as a way to increase hospital efficiency and occupancy rates.

The report sponsored by the Academy's Institute of Medicine also recommends shifting from the present system of retrospective cost reimbursement to a prospective rate-setting system. The report states the present third-party system "virtually guarantees the widespread development of excess bed capacity and encourages unnecessary and inappropriate treatment."

Three of the 11 panel members dissented from some or all of the report's conclusions. The major dissent came from Donald G. Shropshire, administrator of the Tucson Medical Center and a representative of the American Hospital Association who wrote "too much of the blame for costs is being put on beds . . . the recommended arbitrary formula . . . has no real basis in fact."

personal news

DR. R. PHILLIP BURNS of Chattanooga has been appointed Chairman of the Department of Surgery of the UT Clinical Education Center in Chattanooga.

DR. JOHN S. DERRYBERRY of Shelbyville has been named to serve on a new Joint Commission on Prescription Drug Use.

DR. R. H. DUNCAN of Knoxville has been elected Chairman of the Park West Hospital Board of Directors.

DR. CLARENCE FARRAR of Mancheser has been

elected as President-Elect of the Coffee County Medical Association.

The newly elected Fellows of the American College of Physicians from Tennessee are: DR. R. K. FARRIS, DR. JAMES D. YATES and DR. RONALD F. YATTEAU all of Knoxville. Also elected was DR. MOHAMMED MOINUDDIN of Memphis.

DR. FRED M. FURR of Concord has been elected to the Board of Trustees of the American Society of Bariatric Physicians.

DR. G. BAKER HUBBARD of Jackson was named Chairman of the Southern Medical Association's Council at their 70th Annual Scientific Assembly in New Orleans.

DR. A. L. JENKINS of Knoxville has been reelected Secretary-Treasurer of the American College of Emergency Physicians.

DR. DAVID P. MCCALLIE of Chattanooga received one of the highest Community Service Awards from the Tennessee Hospital Association for his efforts in the development of the Southeastern Tennessee Area Health Education Center and for his work in gaining passage of an independent hospital authority to administer Erlanger and Children's hospitals.

DR. GRACE E. MOULDER of Shelbyville was installed as President of the Tennessee Academy of Family Physicians during the 28th Annual Assembly of the Academy.

DR. DOUGLAS H. RIDDELL has been installed as the new president of the Nashville Surgical Society. Other officers are DRS. GREER RICKETSON, Pres. Elect, and HERSCHEL A. GRAVES, JR., Secy.-Treas. Outgoing President is DR. JOHN L. SAWYERS.

DR. JOSE A. VECIANA of Martin received a Distinguished Service Award for his work during a recent outbreak of encephalitis in Weakly County.

DR. THOMAS WHITE of Columbia was elected President of the medical staff of the Maury County Hospital Board of Trustees.

DR. WENDELL W. WILSON of Old Hickory has been named Family Physician of the Year by the Tennessee Academy of Family Physicians at its Annual Meeting in Gatlinburg.

announcements

NATIONAL 1977

- | | |
|------------|---|
| Jan. 17-21 | Nevada Academy of Family Physicians, Sahara-Tahoe Hotel, Lake Tahoe |
| Jan. 17-21 | Southeastern Breast Oncology Conference, Marriott Hotel, Miami |
| Jan. 27-29 | Southern Society for Pediatric Research, Braniff Place Hotel, New Orleans |
| Jan. 28-30 | Midwinter Radiological Conference, Century Plaza Hotel, Los Angeles |
| Jan. 28-30 | Southern Radiological Conference, Grand Hotel, Point Clear, Alabama |

- | | |
|--------------------|---|
| Jan. 30-
Feb. 4 | American Society of Contemporary Medicine and Surgery, Diplomat Hotel, Hollywood, Florida |
| Feb. 2-6 | American College of Psychiatrists, Hyatt Regency Hotel, Atlanta |
| Feb. 3-8 | American Academy of Orthopaedic Surgeons, Las Vegas Hilton and Convention Center, Las Vegas |
| Feb. 28-
Mar. 3 | American College of Cardiology, Philadelphia Civic Center, Philadelphia |
| Mar. 10-11 | American Society of Regional Anesthesia, Diplomat, Hollywood, Florida |
| Mar. 24-27 | American Society of Internal Medicine, Alameda Plaza, Kansas City, Missouri |
| Mar. 25-27 | American Psychosomatic Society, Fairmont Colony Square, Atlanta |
| Mar. 26-31 | American Academy of Allergy, Americana Hotel, New York |
| Mar. 28-31 | American College of Surgeons, Los Angeles Hilton, Los Angeles |
| Apr. 3-7 | Southeastern Surgical Congress, Americana, Bal Harbour, Florida |
| Apr. 13-14 | American Geriatrics Society, San Francisco |
| Apr. 17-21 | American Academy of Pediatrics, New Orleans Marriott, New Orleans |
| Apr. 17-22 | American College of Radiology, Shamrock Hilton, Houston |
| Apr. 17-24 | North American Clinical Dermatologic Society, Hyatt House, Monterey, California |
| Apr. 18-21 | American College of Physicians, Dallas |
| Apr. 19-23 | Christian Medical Society, Wichita Hilton Inn, Wichita |
| Apr. 23-28 | American Pediatric Society, Chalfonte-Haddon, Atlanta |
| Apr. 25-30 | American Academy of Neurology, Atlanta Hilton, Atlanta |
| Apr. 29-
May 1 | American Trauma Society |
| STATE | |
| Apr. 13-16 | Tennessee Medical Association, Hyatt-Regency, Nashville |

* * *

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Physician, or Surgeon, for Spinal Cord Injury Service in modern 923-bed hospital. Deal with many problems of medicine. Emphasis on total rehabilitation, or maintenance of rehabilitation goals, through team approach. Liberal benefits, malpractice coverage, rotating night duty. Equal Opportunity employer.

Contact: Chief of Spinal Cord Injury Service
Veterans Administration Hospital
1030 Jefferson Avenue
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(901) 523-8990

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continuing education opportunities

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Avenue, Nashville, Tennessee 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman can plan an individualized program of one-to-four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Anesthesiology	Bradley E. Smith, M.D.
Medicine	Grant W. Liddle, M.D.
Allergy & Immunology	Samuel Marney, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Endocrinology	David Rabin, M.D.; David N. Orth, M.D.
Diabetes	Oscar B. Crofford, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.

Oncology	Robert Oldham, M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Orthopaedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Surgery	
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neil, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.
Cancer Chemotherapy	Vernon H. Reynolds, M.D.

ELIGIBILITY: All licensed physicians are eligible.

ADMINISTRATIVE FEE: \$200.00 per week.

CREDIT: American Medical Association Physician's Recognition Award and American Academy of Family Physician's Continuing Education accreditation.

APPLICATION: For further information and application, contact:

Paul E. Slaton, M.D., Director, Continuing Education
305 Medical Arts Building
Nashville, Tenn. 37212 Tel. 615/322-2716

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Continuing Medical Education Schedule

1977

Jan. 28-29	Annual Edwards Lectureship in Surgery, H. William Scott, M.D.
Mar. 4-5	Update in Anesthesiology 1977, Bradley Smith, M.D.
March	Tumor-Associated Products, Robert Oldham, M.D.
Mar. 30-31, Apr. 1	Hypertension: Update 1977, American College of Physicians, Grant W. Liddle, M.D.; Paul E. Slaton, M.D.
April	Prostatic Diseases in General Medicine, Robert Rhamy, M.D.
Apr. 22-23	Gynecologic Oncology and the Eighth Annual Whitacre Lecture, Conrad Julian, M.D.
Apr. 28	Annual Frank H. Luton Lecture in Psychiatry, Marc Hollender, M.D.

- May 19-20 Postgraduate Course in Allergy, Vanderbilt University; University of Tennessee, Memphis; University of Mississippi, Philip Lieberman, M.D.; Samuel Marney, M.D.
- May 14 International Medicine, Vanderbilt University Medical Alumni Reunion
- May 25-26 Sixteenth Annual Seminar in Psychiatry, Frank Luton, M.D.
- June 21-22-23 National Symposium on Impedance Screening in Children, Bill Wilkerson Hearing & Speech Center, Fred Bass, Ph.D.; Charles Bluestone, M.D.; Jerome Klein, M.D.; Earl Harford, Ph.D.
- September Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.
- Oct. 17-22 Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.
- December What's New in Obstetrics for Physicians, Frank H. Boehm, M.D.

For information contact:

Vanderbilt Continuing Education
305 Medical Arts Building
Nashville, Tennessee 37212

THE UNIVERSITY OF TENNESSEE COLLEGE OF MEDICINE Continuing Education Courses 1977

- Feb. 10-11 Advanced Hypnosis, Memphis
- Feb. 12-13 Obstetrical Anesthesia, Memphis
- Feb. 25-26 Current Concepts of Cancer Management, Memphis
- Feb. 27-
Mar. 2 Otolaryngologic Allergy, Memphis
- Mar. 6-9 Basic Principles of Rhinoplasty, Memphis
- Mar. 16-18 Gynecologic Endocrinology, Memphis
- Mar. 21-26 General Review Course for Family Physicians, Memphis
- April 4-6 Colposcopy, Memphis
- April 21-22 Controversies in General Surgery, Memphis
- April 28-29 Leigh Buring Conference, Memphis
- May 23-27 Intensive Review of Anesthesiology, Memphis
- May 25-28 Basic Clinical Electrocardiography, Paris Landing Inn (Pickwick Lake)

SYMPOSIUM ON ENDOCRINE CAUSES OF MENSTRUAL DISORDERS

Hilton Inn, Memphis, Tenn.
March 16-18, 1977

Included are Normal Events, Central Nervous Systems

Disorders, Ovarian Disorders, Pituitary Disorders.

A Postgraduate course for practicing physicians approved for 20 Elective Hours by AAFP.

For further information, please contact:

Division of Continuing Education
UTCHS
800 Madison Avenue
Memphis, Tennessee 38163

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER Chattanooga

- Jan. 27-28 Pulmonary Medicine for the Clinician
Chattanooga Choo-Choo
- Feb. 17-18 Basic Medical Genetics for the Practicing Physician
Chattanooga Choo-Choo
- March 3-4 Arthritis and Office Orthopaedics
Pine Isle Resort
Buford, GA
- March 7-11 Diagnostic Radiology for the Primary Care Physician
Tamarron Ski Lodge
Durango, CO
- March 30 Urology Circuit Course
Athens, TN
- March 31 Urology Circuit Course
Chattanooga, TN
- April 1 Urology Circuit Course
Dayton, TN
- April 22-23 Pediatric ENT
Chattanooga Choo-Choo
- May 16-20 General Radiology
Sahara Hotel
Las Vegas, NV

Medicine Update '77

- Athens, Tenn. 12:00 noon to 2:00 p.m.
- Chattanooga,
Tenn. 4:00 to 6:00 p.m.
- Jan. 20 Dermatology
- Feb. 3 Cardiology
- Feb. 24 Gastroenterology
- March 10 Rheumatology
- March 24 Neurology
- April 7 Endocrinology
- April 28 Oncology
- May 12 Infectious Disease

ACP 1977 REGIONAL MEETINGS, POSTGRADUATE COURSES

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three-to-five days, they are directed toward practicing physicians and are presented in association

with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category I requirements for the AMA Physician's Recognition Award.

See August 1976 issue for complete listing.

Topics in Internal Medicine

The American College of Physicians will sponsor a postgraduate course Selected Topics in Internal Medicine at the West Virginia University Medical Center in Morgantown, Mar. 2-4.

Director Edmund B. Flink, F.A.C.P., and faculty will present three days of review of what is new in internal medicine. Special topics in medicine and specialties will be presented in lectures, panels, demonstrations, illustrative case analyses and workbook exercises. Related topics will be presented in blocks. Emphasis will be on newer diagnostic information and participation in problem situations is planned.

Registration fee for ACP Fellows, Members, Residents and Research Fellows will be \$100; Nonmembers, \$150; and ACP Associates, \$50.

Clinical Hematology

The University of Alabama School of Medicine will host a March 7-9 ACP postgraduate course on Solving Problems in Clinical Hematology. Thomas W. Sheehy, F.A.C.P., and Marcel E. Conrad, F.A.C.P., co-directors, will emphasize six important areas of clinical hematology through lectures and in-depth (small group) discussions centering around clinical case material which will be provided participants prior to their arrival in Birmingham.

The six areas are malignant lymphoma; leukemia; hemolytic anemia; nutritional hematology; platelet abnormalities; and immune deficiency disease. Pertinent pathologic material from tissue sections, bone marrows, and peripheral blood will be provided on color slides for each of the sections. These will accompany the case material made available prior to the beginning of the course.

Registration fees for ACP Fellows, Members, Residents and Research Fellows will be \$120; Nonmembers, \$175; and ACP Associates, \$60.

Infectious Disease Course

The Third Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley, Idaho will convene March 7-11. Director Jack S. Remington, F.A.C.P., and faculty will provide a thorough and up-to-date review of topics in infectious diseases of special interest to the internist and generalist in practice. This five-day program will devote particular emphasis on newer concepts of diagnosis, treatment and prevention of infectious diseases and a separate session will be devoted to the clinical relevance of the recent advances in the knowledge of host defense mechanisms against infection.

Topics to be covered will include the opportunistic fungal, bacterial and viral infections seen in the com-

promised host, the hepatitis viruses and vaccines, respiratory bacterial and viral infections and vaccines, and the spectrum of disease entities associated with mycoplasma. Sessions on bacterial infections will cover gram negative sepsis and shock and the problem of disseminated intravascular coagulation. There will also be discussions of urinary tract infections. Other subjects will include endocarditis, anaerobic infections, meningitis, streptococcal infections, gonorrhea and syphilis, the bacterial diarrheas, and diseases caused by slow viruses.

Sessions on therapy will cover the newer antifungal and antibacterial agents and their proper use in treatment and prophylaxis. The use of antibiotic combinations and the effect of host factors that may influence antibiotic action will also be covered. The special problem of hospital-acquired infections and their epidemiology will be discussed.

Registration for ACP Fellows, Members, Residents and Research Fellows will be \$140; Nonmembers, \$200; and ACP Associates, \$70.

Physiologic Basis of Clinical Disease

Director Donald W. Seldin, F.A.C.P., has designed a March 14-17 course on The Physiological Basis of Clinical Disease to provide an understanding of the basic physiologic concepts of disease and the practical application of these concepts to the understanding of clinical disorders of man.

Presented at the University of Texas Health Science Center at Dallas Southwestern Medical School, the pathophysiology of major diseases of the endocrine, cardiovascular, pulmonary, gastrointestinal-liver, immunologic-hematologic and renal systems will be covered.

In each case the underlying physiologic derangements will be employed as the basis for providing a rational means of diagnosing and treating the disease in question.

Registration fees for ACP Fellows, Members, Residents and Research Fellows will be \$120; Nonmembers, \$175; and ACP Associates, \$60.

Recognition and Management of Heart Disease

The University of Arizona College of Medicine, Tucson, will host a three-day ACP postgraduate course March 17-19. Directors Frank I. Marcus, F.A.C.P., and Gordon A. Ewy, M.D., will present Clinical Recognition and Management of Heart Disease—1977 which will place emphasis on the approach to the prevention of sudden cardiac death, the current status and indications for coronary artery bypass surgery, diagnosis and treatment of valvular heart disease and modern drug therapy.

Comprehensive audio-visual equipment will permit maximum audience participation. Electives will allow the physician to explore areas of interest in greater depth.

Registration fees for ACP Fellows, Members, Residents and Research Fellows will be \$100; Nonmembers, \$150; and ACP Associates, \$50.

Endocrinology and Metabolism

Endocrinology and Metabolism will be presented

March 21-25 at the University of California, San Francisco under the directorship of Peter H. Forsham, F.A.C.P. The latest developments will be presented in the fields of; the adrenals, cortex and medulla, the parathyroids both parahormone and calcitonin problems, the thyroid, the pituitary, hypothalamic releasing factors and inhibitory factors, the testes, the ovaries, lactation both normal and abnormal, and diseases of the Islets of Langerhans including excess gastrin.

Important metabolic diseases will be covered, notably the various types of diabetes, diseases of lipid metabolism, gout, glycogen storage diseases and some of the congenital diseases of carbohydrate, protein and fat metabolism. This will be done in terms of pathophysiology, diagnosis and treatment, and there will also be some selected clinical presentations.

Registration fees for ACP Fellows, Members, Residents and Research Fellows will be \$140; Nonmembers, \$200; and ACP Associates, \$70.

Peripheral Arterial Disease and Venous Thromboembolism

The American College of Physicians, the Council on Thrombosis of the American Heart Association, the American Heart Association Northeast Ohio Affiliate, Inc., and the Cleveland Clinic Education Foundation will sponsor the March 23-25 postgraduate course in Cleveland: Peripheral Arterial Disease and Venous Thromboembolism.

This course is to assist physicians in updating their diagnostic and therapeutic skills in acute and chronic venous and arterial thromboembolism as well as other areas of peripheral vascular disease. Emphasis will be on cerebral, visceral and peripheral circulations. Non-invasive and invasive diagnostic modalities will be analyzed. The area of therapy will include anticoagulants, platelet anti-aggregates, thrombolytic therapy, mechanical means that affect blood flow, alterations in autonomic tone and various surgical procedures.

The course will consist of two and a half days of lectures, a movie, question and answer session, and an exhibit.

Registration for AHA Members, ACP Fellows, Members, Residents and Research Fellows will be \$100; Nonmembers, \$150; and ACP Associates, \$50.

Clinical Rheumatology

At the University of Arizona in Tucson will be the March 28-April 1 Clinical Rheumatology: The Diagnosis and Treatment of Arthritis and Related Diseases, to bring the practicing internist up-to-date on the practical aspects of diagnosis and treatment of rheumatoid arthritis and related disease. Clinical observations, laboratory data, roentgenographic findings, new and pertinent modalities of therapy, appropriate physical therapy and the part of corrective orthopedic surgery in arthritis will be particularly emphasized. There will be presentation of basic investigations as correlated with the clinical aspects of diagnosis and treatment.

Fees for ACP Fellows, Members, Residents and Research Fellows, \$140; Nonmembers, \$200; and ACP Associates, \$70.

Gastroenterology and Gastrointestinal Oncology

Towsley Center for Continuing Education at the University of Michigan Medical Center in Ann Arbor will hold a March 28-April 1 ACP postgraduate course in honor of H. Marvin Pollard, M.A.C.P., Honorary Course Chairman. Gastroenterology and Gastrointestinal Oncology, under the directorship of Keith S. Henley, F.A.C.P., will help the internist in the diagnosis and management of gastrointestinal disorders encountered in practice. Emphasis will be placed on the clinical significance of recent advances in knowledge, and should therefore, prove helpful to those studying for specialty and sub-specialty examinations. It will also benefit those who have part-time or full-time teaching responsibilities.

Registration fees for ACP Fellows, Members, Residents and Research Fellows will be \$140; Nonmembers, \$200; and ACP Associates, \$70.

Hypertension Update

Hypertension: Update 1977 will be presented March 30-April 1 at Vanderbilt University School of Medicine in Nashville under the directorship of Grant W. Liddle, F.A.C.P. The course is designed to offer practicing clinicians the opportunity to hear and participate in sessions that will bring their knowledge up-to-date in all aspects of the management of one of the most frequently occurring diagnoses in the practice of medicine: hypertension.

An approach to the diagnosis of the curable causes of hypertension will be outlined. Pseudoaldosteronism, other varieties of "low renin hypertension", and the more common diagnostic dilemmas will be reviewed in greater depth.

Treatment modalities will be reviewed. Problems in the management of complications of treatment and hypertensive emergencies will be discussed and a priority list for drug therapy developed. Major discussion will deal with drugs and dietary compliance. Panels will address controversies in hypertension, e.g., whether to diagnose first or treat and then diagnose.

The use of renin in diagnosis, treatment decisions, and renovascular hypertension will be discussed. Medical versus surgical approaches to renal artery lesions will be reviewed. Ample time will be arranged for group discussion of individual cases and questions and answers.

Registration for ACP Fellows, Members, Residents and Research Fellows will be \$100; Nonmembers, \$150; and ACP Associates, \$50.

UNIVERSITY OF KENTUCKY Mini-Residencies for Medical and Surgical Practitioners in Office Management of Emotional Problems

One, Two and Three Week Courses. Minimum of 40 hours per week.

Tuition Fee: \$350.00 per week for the 1st & 2nd week of training; \$500.00 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

SEVENTH FAMILY MEDICINE REVIEW Session III

February 20-26, 1977

Registration Fee: \$295.00

For further information:

Maxie C. Maulsby, Jr., M.D.
Office of Continuing Education
Department of RBT
University of Kentucky
Lexington, Kentucky 40506

AMERICAN COLLEGE OF CHEST PHYSICIANS 1977 POSTGRADUATE CALENDAR Continuing Education Programs See September, 1976 issue for listing.

PEDIATRIC PULMONARY PROGRAM

The postgraduate course, "The Young Lung—Intensive Care 1977", will be held at the Manor Vail in Vail, Colorado, January 17-20, 1977, sponsored by the American College of Chest Physicians and the University of Colorado Medical Center. This course has been evaluated for 17 hours credit toward the American Medical Association's Physician Recognition Award under Category 1.

The program was designed to provide practicing physicians with up-to-date information on diagnostic techniques, care of the critically ill child and general management of pediatric pulmonary diseases from birth through young adulthood. Sessions will include didactic lectures, panel discussions, and workshops dealing with current respiratory equipment, procedures and problems.

Topics of the three workshops are: "Current Respiratory Equipment and Nursing Procedures," "Emergency Techniques and Instruments in ICU" and the "Use of Mechanical Ventilators in Pediatrics."

While the program will be of special interest to the practicing physician, ICU nurses, senior inhalation therapists and other senior health professionals are encouraged to attend. Registration fees for this course are: ACCP members, \$155.00; Non-member physicians, \$180.00; Residents, nurses, therapists, \$100.00.

ACCP PULMONARY PROGRAM

The American College of Chest Physicians will sponsor the postgraduate course, "Management of Acute and Chronic Respiratory Failure". This program will be held at the Konover Hotel in Miami Beach, Florida, February 7-11, 1977.

This intensive five-day course will stress pulmonary function in health and disease and the assessment of the patient with respiratory insufficiency. This will be followed by presentations of the pathology, and patho-physiologic disturbances present in small airway disease, COPD, ARDS, and pulmonary hypertension.

This program has been evaluated for 26 hours credit toward the AMA Physician's Recognition Award under Category 1. Registration fees are: ACCP members, \$160.00; Nonmember physicians, \$185.00; Residents, nurses and allied health professionals, \$125.00.

For further information:

Dale E. Braddy
Director of Continuing Education
American College of Chest Physicians
911 Busse Highway
Park Ridge, Illinois 60068

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

PROGRAM SCHEDULE

Jan. 24- Feb. 6	"DIFFERENTIAL DIAGNOSIS OF ORAL LESIONS," with Maurice Galante, M.D., Associate Professor of Surgery, School of Medicine; Sol Silverman Jr., DDS, Chairman and Professor of the Division of Oral Biology, School of Dentistry; both at the University of California, San Francisco. "LOW BACK PAIN—CHRONIC," with Peter Marchisello, M.D., Chief, Back Clinic, Hospital for Special Surgery, New York City. "DRUG SPOTLIGHT: ANTIARRHYTHMIC DRUGS," with Edmund H. Sonnenblick, M.D., Professor of Medicine, and Chief of the Cardiology Division; William H. Frishman, M.D., Director of Non-Invasive Cardiology; both of the Albert Einstein College of Medicine, New York City.
Feb. 7- Feb. 20	"SPINAL CORD TRAUMA," with Alain B. Rossier, M.D., Chief of Spinal Cord Injury Service, Veterans Administration Hospital, W. Roxbury, Mass., Professor of Spinal Cord Rehabilitation at Harvard Medical School, Boston. "ANTIBIOTICS IN RENAL FAILURE," with Harold C. Neu, M.D., Associate Professor of Medicine, Associate Professor of Pharmacology, and Head of Section on Infectious Diseases, College of Physicians and Surgeons, Columbia University, New York City. "BENIGN PROSTATIC HYPERPLASIA," with Earl Wendel, M.D., urologist, Passavant Hospital, Chicago.
Feb. 21- Mar. 6	"ANAEROBIC INFECTIONS, PART I," with Robert Fehety, M.D., Head Division of Infectious Diseases, Department of Medicine, University of Michigan, Ann Arbor.

"ANAEROBIC INFECTIONS, PART II," with William J. Ledger, M.D., Professor of Obstetrics and Gynecology, University of Southern California, and Director of Maternal Fetal Medicine at Women's Hospital, Los Angeles.

"CARCINOMA OF THE PROSTATE," with Earl Wendel, M.D., urologist, Passavant Hospital, Chicago.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

1977 Practice Management and Economic Seminar Schedule

Feb. 17-20	San Diego, California
Apr. 30-May 7	Queen Elizabeth II Cruise
June 18-25	Madrid, Spain
Aug. 20-27	Rome, Italy
Oct. 2-9	Key Biscayne, Florida

ALTON OCHSNER MEDICAL FOUNDATION

"Vascular Surgery—Updated"

February 3-5, 1977

Ochsner Medical Institutions

Monroe Hall

This course is directed toward the practicing general and vascular surgeon and its purpose is to update the practicing surgeon as to the newer developments in vascular surgery. There are to be short, formal lectures and panel discussions with questions from the audience. There will also be some wet clinics to demonstrate the operative technic of certain procedures.

Registration Fee—\$125.00

Please send all requests for information to:

Continuing Education
Alton Ochsner Medical Foundation
1516 Jefferson Highway
New Orleans, Louisiana 70121
504/834-7070, Ext. 5831

Immunopathology of the Skin

The Seventh Annual Conference on the Immunopathology of the Skin will be given on May 26 to 28, 1977 by the Departments of Microbiology and Dermatology through Continuing Medical Education of State University of New York at Buffalo at the Sheraton East in Buffalo, New York immediately following the Second Annual Westwood Conference organized by Dr. Richard L. Dobson and his associates.

The first part of this conference is designed primarily to afford practitioners a basic understanding of recent advances in the field and to enable them to utilize present knowledge of this subject in their practice. Registration fee is \$95.00. For further information on registration write to Mrs. Gloria Griffin, 219 Sherman Hall, SUNY/B, Buffalo, New York 14214.

Common Pediatric Problems

Children's Hospital National Medical Center and George Washington University are sponsoring a three-day Symposium on Common Pediatric Problems on June 8-10, 1977. It features a Symposium on Hematology, Oncology and Immunology; a Symposium on Adolescence; and a day of workshops. The guest faculty consists of Drs. Robert Baehner, Lewis Barnes, Harvey Colten, Charles Dinarello, Margaret Smith and Sheldon Wolff.

This continuing medical education program has been approved for credit by the American Medical Association and the American Academy of Family Physicians. Further information may be obtained by writing to Mrs. Susan Weiss, 13407 Brackley Terrace, Silver Spring, Maryland 20904.

American Society for Clinical Pharmacology and Therapeutics Speakers Available

The American Society for Clinical Pharmacology and Therapeutics maintains an active Continuing Education Program including a Speakers Bureau. Members of the Society are prepared to provide authoritative postgraduate education in many areas of clinical pharmacology and therapeutics. The Society is an accredited body for continuing medical education.

Limited funds are available to provide honoraria for speakers, and the host organization will be responsible for all travel expenses.

Applications for speakers may be sent to the American Society for Clinical Pharmacology and Therapeutics, 1718 Gallagher Road, Norristown, Pennsylvania 19401.

MARICOPA COUNTY GENERAL HOSPITAL March 18-20, 1977

Emergency Medicine: Clinical-Radiological Correlation

This interspecialty postgraduate seminar will be presented March 18-20, 1977 at Pointe West Resort in Phoenix, Arizona. Content will be directed to radiologists and emergency room physicians. The course is approved for 14 hours of Category I, American Medical Association credit. Tuition: \$110.00.

For further information write to Program Director, Austin R. Sandrock, M.D., Chairman, Department of Radiology, Maricopa County General Hospital, 2601 East Roosevelt, Phoenix, Arizona 85008.

TRAUMA SEMINAR

The second annual Suncoast Trauma Seminar, a continuing education course for physicians and residents, will be held March 9-11, 1977, at the University of South Florida College of Medicine, Tampa, Florida.

The course is sponsored by the American College of Surgeons Committee on Trauma, and co-sponsored by the Department of Surgery, University of South Florida College of Medicine.

Course director is Roger T. Sherman, MD, FACS, Professor of Surgery and Chairman, Department of

Surgery, University of South Florida College of Medicine.

The course, offering a comprehensive program of continuing education in the definitive treatment of the seriously injured, is designed to enhance the knowledge and skills of physicians who are first confronted with trauma patients in rural, suburban and urban hospitals.

Course curriculum will include such trauma topics as: blood volume replacement, monitoring the severely injured patient, thoracic trauma, vascular injuries, management of infection in the trauma patient, metabolic response to trauma, eye injuries, fractures and dislocations of the spine and pelvis, and priorities of the multiple injury patient.

The course has a limited registration of 200. The fee for physicians is \$125; for residents, \$75. Advance registration forms may be obtained by writing to Dr. Sherman at the Department of Surgery, University of South Florida College of Medicine, Box 16, 12901 North 30th Street, Tampa, Florida 33612, or by writing the ACS Trauma Division, American College of Surgeons, 55 E. Erie, Chicago, Illinois 60601.

ALLERGY SCIENTIFIC CONGRESS New York City, March, 1977

The American Congress of Allergy and Immunology, the first scientific assembly to be sponsored jointly by the four national organizations of clinical, research and academic allergists, will be held in New York City, March 26-31, 1977.

The components of the six-day program include two days of postgraduate instruction, March 26 and 27, and a four-day scientific program supplemented by luncheons, seminars and scientific workshops. Several hundred scientific papers on subjects relating to the latest findings in research, diagnosis and therapy of allergic disorders will be presented. Preceding the formal opening of the Congress, on Friday, March 25, 1977, a course in Aeroallergen Identification will be offered by the four societies at the Americana, the headquarters hotel.

FOURTH ANNUAL ASPEN MUSHROOM CONFERENCE Hotel Jerome Aspen, Colorado August 7-12, 1977

The Fourth Annual Aspen Mushroom Conference is designed for physicians, amateur mycologists and scientists interested in the identification and toxic properties of mushrooms. The Conference is sponsored by the Colorado Mountain College, Glenwood Springs and the Beth Israel Hospital, Denver, Colorado.

The program will be structured for the beginner as well as the advanced student by offering independent teaching sessions for each group. Didactic sessions and refresher courses on mushroom identification will be held in the early mornings and late afternoons at the novice and advanced student levels. The program will include mushroom microscopy for a limited number of advanced students, and mushroom chemistry and chro-

matography. Courses on advances in the diagnosis and treatment of mushroom poisoning and on hallucinogenic mushrooms will be offered to physicians and others interested in these subjects.

Generally, in the late summer, the Aspen mountains are productive of a wide variety of mushrooms. Experienced leaders will conduct daily forays into the surrounding mountains to collect edible and poisonous species and study their field characteristics.

Adequate time will be allowed to participate in leisure mountain activities including the renowned Aspen Music Festival.

AMA Physician Recognition Award: Up to 30 hours for Category II.

For further information contact:

Aspen Mushroom Conference
c/o Beth Israel Hospital
1601 Lowell Boulevard
Denver, Colorado 80204
(303) 825-2190 Ext. 354

ADMINISTRATION SEMINAR

A Medical Practice Administration Seminar featuring the AMA's Medical Collection Methods will be held January 26, 1977, 8:30 a.m.-12:00 noon at the Hilton Inn-Central in Nashville.

For further information contact:

Robert C. Fraim Associates, Inc.
10409 Lovell Center Drive
Concord, Tennessee 37720
Telephone (615) 693-0041

* * *

NURSING HOME RULES AND REGULATIONS AVAILABLE

"TMA is encouraged with the increasing number of physicians in long-term health care facilities. As a service, the Association has on hand latest federal rules and regulations regarding operation within nursing homes including physicians' services. Write the TMA office, c/o Long-Term Health Care Committee or check with your local nursing home."

AMA Outlines Policy on Release of Information

The American Medical Association's policy on the release of information from the physician's data file has been reaffirmed by the Board of Trustees. The policy assures appropriate sharing of data within limits that safeguard the confidentiality of individual physician's records and the AMA's proprietary rights and legal liabilities.

Pressure to release data for commercial and other uses has intensified during the past year. The policy provides for the use of data for specific purposes stated on requests approved by the AMA.

However, data cannot be used for the development of independent physician data files, and start-up tapes will not be provided for developing independent data banks or service bureaus.

Data cannot be used to validate the AMA data base unless a binding agreement is signed with the AMA. The AMA will continue to assist individuals, institutions, organizations and agencies with legitimate needs for information.

AMA Gives \$25,000 Grant To Support TV Violence Monitoring

The American Medical Association announced today a grant of \$25,000 to support the TV violence monitoring activities of the National Citizens Committee for Broadcasting. A media reform group based in Washington, D.C., the NCCB is concerned with documenting the amount of television violence portrayed in prime time network television. Their goal is to encourage more thoughtful and informed choices on the part of the public, broadcasters, advertisers and producers.

"This action represents a strong commitment by AMA to endorse and finance activities that will encourage the industry to reduce the amount of violence in TV programming, according to James H. Sammons, M.D., AMA's executive vice president. "Our grant will subsidize NCCB's study of the new fall programming. We believe NCCB is providing a valuable service by ranking TV programs and sponsors according to the extent with which they are identified with violence. The American public has a right to know which programs contain the most violence so that people can then make responsible decisions about family viewing."

At its annual convention in June of this year, AMA's House of Delegates endorsed the position that TV violence is an environmental hazard affecting the health of American children.

NCCB's study, to be completed in early December, is designed to have direct impact on advertisers, ad agencies and networks. Incorporating some procedural refinements in the monitoring and ranking process, the new system will be based on monitoring reports tabulated by using either of two definitions of violence.

Developed by George Gerbner, Ph.D., of the Uni-

versity of Pennsylvania, the first definition includes overt forms of violence, as well as natural disasters, car chases and comedic violence. The second definition is limited to aggressive violence against individuals—physical violence, use of weapons and capital crimes.

Cost of Medical Practice Records Sharp Increases

Soaring inflation, increased malpractice premiums, and higher wages and benefits for employees are the three main reasons it costs physicians more to provide medical service today. This is the finding of an American Medical Association poll of a cross section of American physicians seeking their opinion on why medical costs are rising and how costs can be contained. Doctors also believe government programs, such as Medicare and Medicaid, and expensive new technology are forcing costs of providing medical care higher, the poll indicates.

Nine out of ten MDs responding to the survey say that their practice overhead costs have increased in the last three years, with 44 percent estimating increases ranging between 26 percent and 50 percent. Some 42 percent had increases of 25 percent or less, while the remainder found their costs going up more than 50 percent. Overwhelmingly, physicians (85 percent) believe that, taking all health services costs into account, the greatest savings can be effected in hospitals. Only 6.4 percent think substantial cost savings could be effected in medical office practice.

The single most important step the doctor can take in his own practice to contain costs is related to reducing malpractice premiums or decreasing the incidence of claims, poll respondents declare. Other suggestions for savings include more use of support personnel, increased patient volume handled more efficiently, more attention to budgets, reduction of overhead, and more careful purchasing of supplies.

Many physicians say the main way to reduce costs for patients is to order fewer tests, but they point out that malpractice is forcing them to practice more defensive medicine. Government controls are not the answer, the doctors believe. "Experience has decreed that when the government gets involved, costs go up," one doctor writes.

Malpractice Rates Hurting Patients

Cost of physicians' malpractice insurance is hitting the patient where it hurts—in the pocketbook. Patients paid an estimated \$1.24 for malpractice insurance each time they visited a doctor in 1975. That amount was about 8.1% of the full amount the patient paid for the visit, according to preliminary estimates of the American Medical Association. The impact on the patient this year is even greater because malpractice insurance rates are still on the upswing. In 1973, a patient paid an estimated average of 30 cents per doctor visit for malpractice insurance, or about 2.4% of the full price of the visit.

Physicians paid an average of \$610 for malpractice insurance in 1968 and \$1,905 in 1973. Since then, according to a government survey of the insurance industry, the premiums went up another 84% in 1974

and 125% in 1975. The AMA used those percentage increases to estimate the average payment per doctor in 1975 for malpractice insurance, \$4,533.

All told, doctors' business expenses (including their malpractice insurance rates) have been rising substantially faster than increases in doctors' fees. During the eight years 1966-1974, doctors' business costs per patient were rising at an 8.3% per year rate. At the same time, according to the Consumer Price Index, doctors' fees went up at a 6.2% average annual rate.

Studies indicate that the sharp rises in malpractice insurance rates are also having a "ripple effect" on patient care and costs, the AMA notes. In a survey of its members the Texas Medical Association recently identified the steps physicians are taking to avoid a malpractice suit:

- 67% of the Texas doctors said they were ordering more X-rays;
- 66% were ordering more lab tests;
- 65% were making greater use of a second physician's opinion;
- 51% were setting limits on the procedures they were willing to perform;
- 50% were delegating less responsibility for the patient's care to others;
- 48% were hospitalizing their patients more.

Forty-eight percent of the Texas physicians said increases in their malpractice insurance premiums had forced them to raise their fees in 1975, and 95% anticipated that they would have to raise their fees in the future for the same reason.

"When Federal controls on physician fees were dropped in 1974, we asked physicians to do their best to hold the line," commented AMA executive vice president James H. Sammons, M.D. "Physician fees have not risen as rapidly as their costs. But no one can reasonably expect doctors to absorb the sometimes horrendous impact of increased malpractice insurance premiums."

HEW Medicare Regulations

The Department of Health, Education, and Welfare today published final regulations under which Medicare providers may obtain judicial review of any final decision of the Provider Reimbursement Review Board, or of any reversal, affirmance, or modification by the Secretary.

The five-member Provider Reimbursement Review Board under Medicare has as its function to hear Medicare appeals by institutional health care providers who disagree with the cost determinations made by health insurance organizations acting as fiscal intermediaries in the administration of Medicare hospital insurance. Members must be authorities in health care costs.

Under the regulations, a Medicare provider may file for judicial review by a Federal court after the final decision of the Provider Reimbursement Board, or of the Secretary, but must do so within 60 days of the final decision.

The Department may elect to review any decision of the Board but must do so within 60 days after the provider has been notified of the Board's decision.

The Advance of Knowledge About Alcoholism

A new definition of alcoholism, made possible by recent increases in understanding of the effect of alcohol on the body and brain of man, was announced today by the joint National Council on Alcoholism/American Medical Society on Alcoholism Committee on Definitions.

ALCOHOLISM is a chronic, progressive, and potentially fatal disease. It is characterized by tolerance, and physical dependency, pathologic organ changes, or both, all of which are the direct or indirect consequences of the alcohol ingested.

1. "Chronic and progressive" means the physical, emotional and social changes that develop are cumulative and progress as drinking continues.
2. "Tolerance" means brain adaptation to the presence of high concentrations of alcohol.
3. "Physical dependency" means that withdrawal symptoms occur from decreasing or ceasing consumption of alcohol.
4. The person with alcoholism cannot consistently predict on any drinking occasion the duration of the episode or the quantity that will be consumed.
5. Pathologic organ changes can be found in almost any organ, but most often involve the liver, brain, peripheral nervous system, and the gastrointestinal tract.
6. The drinking pattern is generally continuous but may be intermittent, with periods of abstinence between drinking episodes.
7. The social, emotional, and behavioral symptoms and consequences of alcoholism result from the effect of alcohol on the function of the brain. The degree to which these symptoms and signs are considered deviant will depend upon the cultural norms of the society or group in which the person lives.

The definition was reviewed and endorsed by the Executive Committee of the American Medical Society on Alcoholism, the single medical group devoted to the treatment of this disease, and the National Council on Alcoholism, the volunteer health agency in the U.S. working for the control of alcoholism.

* * *



"BESIDES STATE AID, FOUNDATION GRANTS, AND PHILANTHROPIC DONATIONS, DOES ANYONE KNOW HOW WE CAN RAISE A FEW BUCKS?"

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of The Institute for Scientific Information

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References should be limited to 20 for major communications and to less than 10 for Case Reports. They should appear at the end of the paper. Personal communications and unpublished data should not be included. The following minimum data should be typed double space: names of all authors, complete title of the article cited, name of Journal abbreviated according to Index Medicus, volume number, first and last page numbers, and year of publication. They should conform to the style in AMA publications: Carrol, RE and Berman, AT: Glomus Tumous of the Hand. J Bone Joint Surg 54:691-703, 1972. All references must be cited in the text in numerically consecutive order and should not be listed alphabetically.

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RECENT CHANGES

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Informational Bulletin #433-76

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special report
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Drug Substitution

The Common Denominator of Health Progress
RESEARCH

Mailgram

Current Concepts in the Diagnosis And Treatment of Cancer A Symposium Part II

Adjuvant Chemoimmunotherapy of Cancer

ROBERT K. OLDHAM, M.D.

ADJUVANT CHEMOTHERAPY

Adjuvant therapy is a relatively new concept in cancer management. For solid tumors, adjuvant therapy is the application of further treatment after primary surgical or radiotherapeutic management. This means patients are being treated after primary therapy in the absence of clinically detectable cancer. The concept of adjuvant therapy is based on statistical expectations. It is known that cancer will ultimately recur in a significant number of patients because clinically non-detectable "micro-metastasis" are present after initial therapy.

Breast cancer illustrates the concept of adjuvant therapy very well, as the anatomical distribution of the primary lesion has significant prognostic implications. (Table 1) In breast carcinoma, for example, a patient with negative lymph nodes in the axilla has a very low recurrence rate over the subsequent 5-10 years (perhaps 20 percent). By contrast, a patient with four or more positive nodes in the axilla has a greater than 80 percent chance of recurrence of

Table 1

	Failure Rate (%) in Breast Cancer After Primary Treatment	
	5 Years	10 Years
All Patients	40	50
Negative Nodes	18	24
1-3 Positive Nodes	50	65
4+ Positive Nodes	79	86

the breast carcinoma within the next ten years. Consequently, to tell a patient with four nodes in the axilla that the tumor has been completely removed is obviously going to be incorrect 80 percent of the time. In such individuals with a high statistical likelihood for recurrent disease it is currently believed that adjuvant therapy, in an attempt to prevent recurrence, may be the most effective method of management.

It is axiomatic in the treatment of leukemia, lymphoma and solid tumors that the lower the cell mass the more effective the treatment. Therefore, waiting for tumors to recur (the more conservative approach) is likely to lessen our chances of controlling the disease. Most of the information available to date in the management of solid tumors indicates that more aggressive earlier treatment is more likely to result in higher control rates. This concept was initially postulated for leukemias and lymphomas and is now being applied increasingly to certain solid tumors. As is

From the Division of Oncology, Vanderbilt University Medical Center, Nashville, Tenn. 37232.

This and the following paper were presented as a part of a Symposium at the 82nd Annual Meeting of the Upper Cumberland Medical Society, Red Boiling Springs, Tenn., June 19, 1976.

illustrated in Table 2, recurrent disease in breast carcinoma, particularly if metastatic to other organ sites, is essentially a lethal sign. Three years after the time metastatic disease is first diagnosed, only 20 percent of the patients are still alive. Although combination chemotherapy significantly prolongs life in patients with metastatic breast carcinoma, the ultimate control of the disease over the ensuing 5-10 years is relatively poor. It is clear that a recurrence in most

Table 2

Percent Survival After Recurrence of Breast Cancer	
1 Year	82
2 Years	50
5 Years	10
10 Years	5

solid tumors is a lethal sign as opposed to being a signal for further therapy.

For the reasons cited above, adjuvant therapy has now come of age in cancer management. Two recent studies have been published on the adjuvant therapy of breast carcinoma.^{1,2} The initial study utilized Alkeran post-surgically in the adjuvant care of breast cancer patients (Table 3). Alkeran is an alkylating agent which has been used in the treatment of metastatic carci-

Table 3

	Failure Rate After Surgery Alkeran Study—18 Months		
	All Patients	Pre- Menopausal	Post- Menopausal
Alkeran	10% (10/103)	3% (1/30)	11% (7/66)
Placebo	20% (24/108)	30% (11/37)	21% (13/63)

noma of the breast with only modest success. When applied post-surgically to patients with a high expectation of recurrence (those with positive axillary nodes) it has decreased the recurrence rate as compared to control group who were left untreated after primary therapy. The follow-up in these patients is now greater than three years and the most recent results appear to indicate that Alkeran is most effective in preventing recurrence in pre-menopausal women.

Cytosan, Methotrexate and 5-Fluorouracil (5-FU) is a combination of three anti-cancer agents which has been effective in the treatment of metastatic carcinoma of the breast. This combination, termed CMF, will induce a regression

of disease in over half of the patients with widely metastatic disease. Recently these drugs have been applied by Bonnadonna² to the adjuvant treatment of patients with breast carcinoma. (Table 4) Again, based on the statistical expectation for recurrence in patients with positive axillary nodes, CMF has been given for one year

Table 4

	Failure Rate After Surgery CMF Study—30 Months		
	All Patients	1-3 Nodes	4+ Nodes
CMF	5% (11/207)	4% (5/139)	9% (6/68)
Placebo	24% (43/179)	17% (21/125)	41% (22/54)

after surgery. In comparison to a control group treated with placebo after their initial surgical procedure, those who were treated with CMF had a significantly lower recurrence rate. For example, in the patients with four or more axillary nodes approximately 75 percent of the placebo treated group have recurred by 30 months, whereas only approximately 15 percent of the CMF treated group have recurred. Although the data are less striking for those patients with one to three positive axillary nodes, a statistical difference was also forthcoming there. Because of the survival data shown earlier, where it was demonstrated that recurrence in breast carcinoma is a lethal sign, the use of adjuvant therapy to prevent recurrence may significantly extend the life span of these patients. Whether or not this represents a delay in disease recurrence or whether it will ultimately represent control of the disease on a more permanent basis remains to be seen.

One of the problems that physicians are very conscious of in relation to chemotherapy is the problem of toxicity. One of the reasons toxicity has been particularly marked with anti-cancer therapy is that many of the patients are terminally ill with bulky, widely metastatic disease at the time treatment is instituted. For chemotherapy to work in such patients is asking quite a lot. It is in such terminally ill patients that the toxic manifestations have been the most striking. In contrast, those patients treated with adjuvant therapy (such as those cited above on CMF) are generally ambulatory, in a good state of general health and are much less affected by toxic side effects of treatment. The percentage of total dose administered was very high in these patients. Seventy-five percent received a full dose of Cytosan, 80 percent a full dose of Methotrexate, and 80 percent

a full dose of 5-FU. Since the doses are reduced for toxic manifestations, this means that toxicity was generally mild with this drug combination. Table 5 shows that although only 4 percent of the patients in the CMF group had no toxicity, the

Table 5

Toxicity of CMF		
	# Patients	%
Leukopenia		
2,500-4,000	139	67
<2,500	8	4
Thrombocytopenia (<75,000)	29	14
Hair Loss	114	55
Mucositis	37	18
Cystitis	57	28
No Toxicity	8	4

patients with severe toxicity were rare. Only 4 percent had severe leukopenia (less than 2500/mm³) and since it is recognized that the white count must be below 1500 before serious problems of infection are common, this does not represent severe leukopenia. Only 14 percent had a platelet count of less than 75,000 and the platelets must be below 25,000 before bleeding becomes a severe and frequent problem. In conclusion, the adjuvant therapy of breast carcinoma has been effective over this short term and has been relatively non-toxic in this group of patients.

COMBINATION CHEMOTHERAPY

The principle of using combination chemotherapy is another important concept. It is derived from the data with acute lymphocytic and acute myelocytic leukemia, and with lymphoma and Hodgkin's disease. As is shown in Table 6, regressions and complete remissions are induced

Table 6

Complete Remissions and Duration in Advanced Hodgkin's Disease		
	Complete Response	Medium Duration (Months)
Nitrogen Mustard	20%	2.5
Vincristine	<10%	...
Procarbozine	<10%	...
Prednisone	< 5%	...
MOPP	81%	36

by single agents at low frequency in these diseases. For example, for Hodgkin's disease each of the chemotherapeutic agents active gives only about a 20 percent remission rate as a single agent. When appropriate combinations are put together, 80 percent of the patients go into complete remission. In addition to a higher complete

remission rate with combination chemotherapy, the duration of unmaintained remission is much longer with combination therapy. Therefore, single drug chemotherapy in the treatment of leukemia, lymphoma and Hodgkin's disease is of historical interest only. Combination chemotherapy is exclusively utilized in these diseases at the present time.

For solid tumors, single drug chemotherapy is useful in inducing objective responses in a small percentage of patients, and it may give palliation from distressing symptoms as well. Here, as in the diseases cited earlier, combination chemotherapy appeared to be much more effective than single agent treatment. Breast cancer, for example, responds to single agents such as Cytosan or 5-FU in less than 20 percent of the cases. A combination such as CMF is capable of inducing regressions in metastatic carcinoma of the breast in greater than half of the cases. With other combinations utilizing Adriamycin as many as 75 percent of the patients with metastatic carcinoma of the breast will respond to treatment. So combination chemotherapy with the correct combination, in the right sequence, at the right dose, utilizing the correct schedule, is the appropriate mechanism by which most solid tumors should be treated. When applied early in the adjuvant setting such as is discussed here, one gives the patient the best expectation for successful cancer control.

The principles involved in therapy of carcinoma of the breast are relevant to tumors with a relatively low level of biologic aggressiveness. The doubling time and growth rate for carcinoma of the breast is quite slow as compared to many of the more aggressive tumors. By contrast, osteogenic sarcoma is a disease with a very high biological aggressiveness and a very rapid growth rate. Patients with osteogenic sarcoma will 80 percent of the time demonstrate lung metastasis by 24 months after primary surgical extirpation. Lung metastasis in osteogenic sarcoma has been a lethal sign of recurrence. Practically speaking, 100 percent of those with recurrent disease are dead in two years. This means that therapy for recurrence is ineffective and the recurrence is lethal in such patients. Current studies indicate that the patients treated post-surgically for osteogenic sarcoma with adjuvant therapy with either high dose Methotrexate or with Adriamycin or a combination of the two drugs have a much lower recurrence rate at 24 months (Table

7). It is important to understand that although patients with metastatic disease can respond to these drugs as well, the cell mass is much lower in patients having had adjuvant therapy and their responses are likely to be much more dur-

Table 7
Failure Rate After Primary
Surgery—Osteogenic Sarcoma
(30 Months)

	Pulmonary Metastasis	Dead
High Dose Methotrexate	30%	5%
Historical Control	80%	75%

able. As these data indicate by 24 months only 20 percent of the patients with osteogenic sarcoma in the absence of adjuvant therapy are alive, whereas 85 percent of those on adjuvant therapy were alive at 24 months.

In summary, it appears that for adjuvant chemotherapy the points to be remembered are as follows:

1) Multiple drug chemotherapy is generally more effective than single drug chemotherapy.

2) Application of currently available drugs in an appropriate manner can make a difference in the biological behavior of these tumors.

3) Small amounts of tumor cells may respond whereas larger amounts may not.

4) The biological behavior of these tumors is not a mystery but is in large part predictable at the time of primary therapy given a reasonable amount of information on the distribution of disease at the time of primary intervention.

IMMUNOTHERAPY

A second modality that is currently being explored in cancer management is immunotherapy. Immunotherapy has been tried in leukemias and lymphomas and in certain solid tumors and, like adjuvant chemotherapy, it is *most* effective when the cell mass is extremely small. Unlike chemotherapy, it appears to be effective only when the cell mass is extremely small. That is, chemotherapy may well induce a remission in some cases where clinical disease is present, whereas immunotherapy will probably not be effective in that setting. Therefore, immunotherapy will probably be effective only in the adjuvant setting. It is known there are certain membrane differences between tumor cells and normal cells and that tumor associated antigens exist on the

surface of cancer cells. This potentially makes the tumor cell detectably different from normal cells and gives the possibility of immune recognition as a defense mechanism and as a basis for specific immunotherapy (Table 8).

Another rationale for immunotherapy is that

Table 8
Rationale For Immunotherapy
of Cancer

1. Existence of tumor associated transplantation antigens (TATA).
2. Common TATAs, shared by tumors of same type.
3. Defect in immune response
 general
 restricted

the occurrence of the tumor may indicate a defect in the immunological capability of the patient and that immunotherapy may in some way be corrective. A wide variety of approaches has been used in the field of immunotherapy (Table 9). Active immunization of the patient with specific or non-

Table 9
Approaches to the Immunotherapy
of Cancer

1. Active immunization
 Specific
 Non-specific
2. Transfer of immune cells, sera, or immune cell products
 Adoptive transfer with cells
 Passive transfer of antisera
 Transfer factor
 RNA from immune lymphocytes
3. Removal or inactivation of tumor promoting factors

specific immunotherapy has been tried. While *specific* immunotherapy refers to immunization with a cancer cell or its products, *non-specific* immunization refers to the general stimulation by non-tumor related materials such as BCG (bacillus Calmette Guérin). BCG and similar bacterial products are utilized because of their ability to stimulate the body's immune defenses in a general way. Other available methods for immunotherapy might include the *adoptive transfer* of immuno-competent cells and the *passive transfer* of serum containing antibody against the tumor. Transfer factor from lymphocytes has also been prepared to stimulate immune responses.

In addition to BCG, chemicals such as dinitrochlorobenzene (DNCB) have been applied to certain skin cancers with some clinical success. These chemicals may cause the host to recognize the skin cancer and destroy it with its own immune capabilities. BCG has been used to stimu-

late the immune responses in a non-specific way in cutaneous melanoma and has been effective when injected into the tumor nodules. BCG has also been given by scarification in a variety of disease states.

Specific immunization with the injection of tumor associated products has also been tried. Whole tumor cells, rendered inactive by X-ray therapy, have been injected into patients to stimulate the immune response. Fractions of tumor cells have been used with modification of tumor cell surfaces to try to make tumor antigens more available for immune stimulation.

In this rapid overview of the immunotherapy, we have not been able to discuss the many clinical studies, but it is apparent that there are a variety of limitations of such therapy. Some of these limitations are shown in Table 10. Immunotherapy is effective only with small amounts

Table 10
Limitations of Immunotherapy

Usually effective only with small amount of tumor present
Threshold effect rather than first order kinetics

of tumor cells (probably less than a million cells) and since it takes over a billion cells to form a 1 cubic centimeter nodule (generally the lowest level of clinical detection) it is obvious that immunotherapy is going to be a relatively weak tool in cancer management.

An early study on immunotherapy is shown in Table 11, which is from the studies of Professor Mathé, an innovative French physician who in

Table 11
BCG + Allogeneic Blasts:
Immunotherapy of ALL (Mathe)
(% Alive)

	120 Days	5 Years
Immunotherapy	60%	50%
Control	10%	0%

the mid-1960's began treating acute lymphocytic leukemia with a combination of BCG and irradiated tumor cells.³ In these initial studies 20 patients were randomly placed on immunotherapy and 10 were assigned no treatment. All of the controls were dead by two years but with a follow-up of as long as seven years about 40 percent of the patients on immunotherapy were still alive. Although there is a variety of problems with experimental design in this study it has stimulated tremendous clinical interest and subsequent clinical trials.

Does immunotherapy have any dangers? There are several theoretical possibilities. Theoretically one could transfer with tumor cells a tumor virus. In an individual with an already growing tumor, that seems not to be too pertinent, but in the adjuvant setting where certain of the patients may already be cured by their primary intervention this is a practical consideration. Enhancement of tumor growth is also a possibility, and there are also certain side effects to patients being treated with immunotherapy. BCG causes a hypersensitivity reaction and injection of some of the other bacterial products can cause a severe fever and chills. But compared to the kind of toxicity that we deal with chemotherapy, radiotherapy and with surgery, the side effects with immunotherapy are generally quite mild.

In solid tumors, such as malignant melanoma, intra-lesional BCG has been tried and as is shown in Table 12 has met with some success. Over half the injected nodules regress and up to 20

Table 12
Intralesional BCG
in Malignant Melanoma

% Regression Injected Nodules	% Regression Non-injected Nodules	% Complete Response
65% (79/121)	21% (25/119)	25% (25/97)

percent of the non-injected nodules may regress simultaneously. The fact that non-injected nodules regress probably means that some systemic immunity is being stimulated by these injections. Table 13 shows a recently published study from UCLA where patients with malignant melanoma

Table 13
Recurrence Rate:
BCG by Scarification
in Resected Stage II Melanoma
(3 Years)

	Morton Study	Pinsky Study
BCG	45%	60%
Historical Control	75%	60%

were treated with BCG and compared to a control group.⁴ These were all patients with stage II melanoma where all known disease was resected and the patients were treated post-surgically. Although the differences here are significant, the study was not randomized and is therefore subject to several criticisms. A concurrent randomized study by Pinsky with BCG

with scarification in similar cases of melanoma did not show any significant effect. More studies are in progress with immunotherapy and these results should be enlightening over the next two to five years.

In acute lymphoblastic leukemia, acute myeloblastic leukemia, malignant melanoma, Hodgkin's disease and perhaps in chronic lymphocytic leukemia there are some initial data which would indicate that these tumors may be altered in a perceptible way by early intense immunotherapy.

CONCLUSION

I think the future in this area involves a reduction of tumor cell mass by primary surgery or radiotherapy followed by aggressive chemotherapy to further reduce the number of tumor cells and perhaps lastly with the use of adjuvant chemoimmunotherapy to eradicate the remaining

cells. The future of cancer management rests with the *earlier* application of current therapeutic modalities to patients with cancer rather than attempts at controlling the disease after widely metastatic cancer is clinically apparent.

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Adjuvant Radiotherapy

STEVEN L. STROUP, M.D.

In an effort to improve cure rates in the treatment of malignant diseases, we have been evaluating reasons for failure in patients treated by customary modalities. In most instances treatment failures have been in two areas 1) local persistent disease after surgery or radiation and 2) distant hematogenous metastases.

Parallel investigations have shown that radiation cell kill is dependent on the dose of radiation given, time over which the dose is delivered, number of tumor cells present and cellular kinetics of the tumor system. From these investigations, it became obvious that smaller numbers of residual cells could be sterilized by a smaller dose than that ordinarily required to sterilize larger foci of tumor cells.

Clinical trials were established to see if surgery and irradiation could be utilized together to improve local control rates. Surgery was utilized to debulk the large number of tumor cells, with radiation used to treat microscopic foci of per-

sisting cells. Less radical surgery could thus be performed and the radiation dose could be modified to reduce the complication of the combined treatment.

This was first applied in head and neck tumors where surgery or radiation alone were having difficulty in controlling the local tumor. When radical surgery and radical irradiation were utilized the cure rates did not improve sufficiently to justify the marked increase in morbidity. Irradiation was then used either pre- or post-operatively at the 5000 rad dose level, with surgery used to remove the existing tumor. Cure rates doubled in some instances, with very acceptable increases in morbidity. These studies proved that 5000 rads could sterilize micrometastases, while we knew from previous experience that at least 6000 rads were needed to sterilize gross epithelial lesions.

These principles have been applied to other tumor systems where surgery has historically had difficulty in managing local disease. The following are situations where we are currently combining

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surgery and adjuvant radiation in our initial treatment plans rather than using irradiation to treat the recurrent or persistent disease.

Soft Part Sarcomas

If simple excision of a soft part sarcoma is performed, there is an 80 percent chance of local recurrence, while if a radical resection is done there is a 29 percent chance of local recurrence. Simple excision plus irradiation shows a 20 percent local recurrence rate with better preservation of function than with radical excision.

A case example is a 16-year-old male, who presented with a one centimeter mass in the right groin which excisional biopsy proved to be an extra-osseous osteogenic sarcoma. Rapid split course irradiation was delivered to the local area and adjuvant systemic chemotherapy was given to prevent hematogenous spread. The patient is now two years post treatment with excellent function and no signs of recurrent tumor.

Adenocarcinoma of Rectum

Adenocarcinoma of the rectum is a frequent tumor which historically has been treated with surgery alone. This method of treatment yields approximately 65 percent 5 years NED survival for patients when the disease is limited to the mucosa and mucularis. When the tumor extends through the serosa and/or involves regional nodes, the cure rate with surgery decreases to 35 percent 5 yr. NED.

Studies are now underway to see if post-operative irradiation given to the high risk patients for treatment of residual microscopic disease can increase the cure rates.

Adenocarcinoma of the Pancreas

Studies have shown that post-operative irradiation given to patients who have had diagnostic procedures and bypass surgery can be curative. Protocol studies are now being utilized to see if combination irradiation and chemotherapy can increase cure rate. This is a tumor that is increasing in incidence and has carried a very poor cure rate with surgery alone.

Barrel-Shaped Carcinoma of Endocervix

Surgery or irradiation alone has been somewhat disappointing in the treatment of the bulky endocervical carcinoma. Recently combined irradiation and an extra-fascial hysterectomy have

been shown to increase cure rates with little increase in morbidity.

Adenocarcinoma of the Endometrium

Irradiation is used as an adjuvant to surgery to sterilize regional nodes and prevent vaginal cuff recurrence.

Hypopharyngeal Carcinomas

When pharyngectomy and radical neck dissection are used alone, the cure rate is approximately 15 percent for lesions larger than two centimeters. Irradiation alone yields the same poor results, but when used as an adjuvant to surgery the cure rates are doubled to about 35 percent 5 years NED.

We have been discussing the use of surgery to debulk tumors and the use of adjuvant irradiation to sterilize residual microscopic tumor. There are tumor systems that are not amenable to surgery and are treated with chemotherapy as the primary treatment. It has been shown that chemotherapy can be curative in certain types of these diseases especially if irradiation can be used to treat the "bulk" disease, thereby utilizing chemotherapy to treat microscopic foci of cells where it has been shown to be more effective. The following are examples of application of these principles.

Oat Cell Carcinoma of Lung

This is a poorly differentiated carcinoma that is primarily in the lung, but due to its virulence, metastasizes hematogenously very early. Irradiation is every effective in the treatment of the primary lesion but often is not curative because of the early systemic spread of the tumor. Effective chemotherapy has been developed to treat the systemic involvement. It has been shown that by using irradiation to treat the large bulk of cells and by utilizing adjuvant chemotherapy to treat potential circulating cells initially the cure rates of this disease can be markedly improved.

Wilms' Tumor

When surgery alone was utilized to treat this malignant tumor of childhood, the cure rates were 16 percent. More recently, as irradiation and chemotherapy have been used as adjuvants to surgery, the cure rates have increased to greater than 80 percent.

Acute Lymphoblastic Leukemia

Great advances have been made recently in the treatment of this once uniformly fatal disease. Today with the use of effective chemotherapy to treat marrow involvement and irradiation to treat sanctuary sites such as CNS, kidneys and testicles the cure rates are now approximately 65 percent.

Extensive Non-Hodgkin's Lymphoma

Radiation is given to decrease the tumor burden so that systemic chemotherapy can be more effective in the treatment of residual systemic cells. This has helped to change chemotherapy's status from a purely palliative tool to a potentially curative tool.

This paper has described the use of radiation as an adjuvant modality to surgery and chemotherapy. With surgery it can be used to treat microscopic residual disease after surgery has removed the majority of tumor cells. With chemotherapy, radiation can be used to kill larger number of cells so as to decrease the tumor burden thereby making chemotherapy more effective.

Several tumor systems were described as examples of the adjuvant use of radiation. Statistics compiled as a summary of the literature were given to show the effectiveness of these concepts.

It is hoped that further gains in cancer cures can be achieved in the future as our understanding of tumor kinetics improves and as we utilize present modalities more scientifically.

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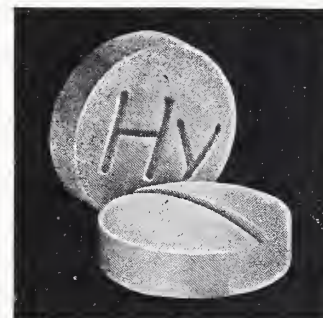
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Cardiovascular Disease Prevention Program in a Community Hospital

ALAN L. GRABER, M.D., AND MARY VIRGINIA MANLEY, R.N.

Introduction:

Symptomatic coronary heart disease is preceded by several decades during which many of its precursors, called cardiovascular risk factors, can be identified.¹⁻³ Some of these risk factors are metabolic, such as hyperlipidemia, hyperglycemia and hypertension, and some are related to behavior and habits, such as cigarette smoking, exercise and obesity. Since both metabolic and environmental factors are often similar within families, and their treatment is often intertwined, this program was designed to identify families at high risk for cardiovascular disease and to teach the young, asymptomatic family members to modify their coronary-prone behavior as a group. Children and young adults have the most to gain from identification and modification of cardiovascular risk factors. This program emphasizes involvement as early in life as possible.

Materials and Methods:

A pilot program was begun at St. Thomas Hospital in Nashville, Tennessee, in the fall of 1975. A nurse identified all patients in the hospital with coronary heart disease, documented by coronary cineangiography or by an acute myocardial infarction. Using these symptomatic patients as index cases, the nurses then sought their asymptomatic relatives for both screening and education regarding cardiovascular risk factors. Persons who elected to participate in the screening program were evaluated as follows. Blood pressure was recorded; fasting serum was measured for cholesterol, triglycerides and glucose; smoking history was obtained; obesity was determined from the Metropolitan Life Insurance Table; and the patient was considered physically inactive if the interview determined that he walked less than one-half mile daily.

RESULTS: During the pilot year, 174 persons

participated in the screening program. Hypercholesterolemia was present in 5 percent of those screened, fasting hypertriglyceridemia in 15 percent, and elevations of both serum cholesterol and triglyceride were found in another 3 percent. Therefore, 23 percent of the subjects screened had some lipid abnormality. Previously undetected hypertension was found in 16 percent of the screened subjects and two young people had unsuspected fasting hyperglycemia (diabetes mellitus).

Twenty-one percent of the screened subjects smoked cigarettes, 4 percent were overweight, and 62 percent had sedentary physical activity patterns.

When hypertension, hyperlipidemia or diabetes was detected, the subjects were referred to their physicians for treatment.

More than 1,000 persons attended the educational sessions, which offered instruction about the development of cardiovascular disease and myocardial infarction, the role of risk factors, and ways to modify or reduce risk factors.

DISCUSSION: Data from this screening program were similar to that of other epidemiological surveys, demonstrating lipid abnormalities or hypertension in up to 20 percent of the population.^{4,5} Identification of the risk factors is of great importance in family members of patients with proven coronary heart disease, since the presence of a positive family history itself constitutes a large cardiovascular risk factor. The effects of multiple risk factors are cumulative. The high incidence of behavioral abnormalities, such as cigarette smoking, over-eating and under-exercising, which frequently are similar within a family, can be emphasized in an educational program, particularly if begun early in life.⁶ Children and young adults in coronary-prone families should be motivated to modify potentially destructive behavior patterns. While it would be ideal to identify and modify risk factors in the pre-symptomatic stage throughout the community, the immediate family members of patients who recently suffered a symptomatic coronary event are accessible to screening at the hospital.

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Supported by a grant from the Middle Tennessee Heart Association.

C-V DISEASE PREVENTION/Graber

They are motivated, at least for the short-term, particularly if they face the problem as a family group.

SUMMARY: Cardiovascular risk factors were identified in asymptomatic family members of hospitalized patients with proven coronary heart disease. The family members were determined to be at risk because of a positive family history of coronary heart disease. Screening for cardiovascular risk factors disclosed lipid abnormalities in 23 percent, previously undetected hypertension in 15 percent, and two cases of asymptomatic fasting hyperglycemia. In addition to the metabolic and blood pressure abnormalities, high incidences of behavioral factors such as cigarette smoking, over-eating and under-exercising were also demonstrated. Twenty-one percent of the screened family members were cigarette smokers, 44 percent were over-weight and 62 percent had a sedentary physical activity pattern. Metabolic and environmental factors are often similar within

families. A hospital educational program designed to reduce cardiovascular risk factors in these families has been initiated.

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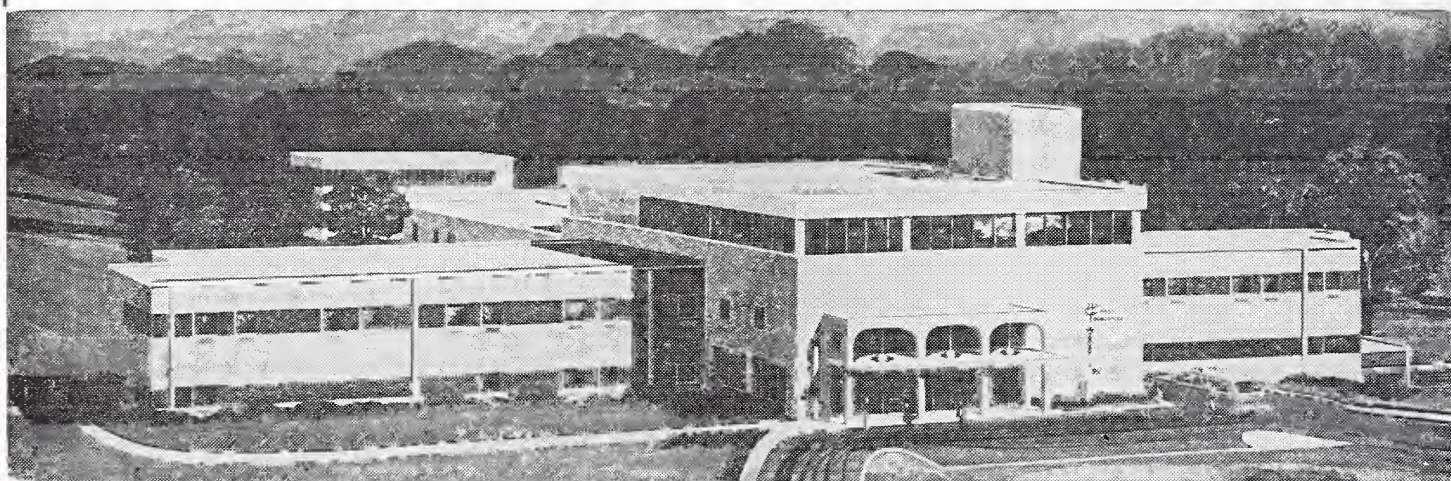
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Continuing Medical Education: The Present State of the Art

JOHN B. THOMISON, M.D.*

Medical education is a process which for the physician begins the day he enters medical school and continues throughout his career. For purposes which are mostly administrative this continuum is divided into undergraduate, graduate, and post-graduate, the last usually referred to as Continuing Medical (or Physician) Education.

Undergraduate Medical Education And the LCME

Undergraduate medical education began in the days of Amen-hotep and Hippocrates, if not earlier, first as a preceptorship, which was the major mode of training. Schools later grew up around some of the teachers and in the Middle Ages the great schools of Europe were established. The first schools on the American continent began near the end of the 17th century, and even a hundred years later, at the time of the American Revolution, there were only a few, which were confined to the east coast. The next hundred years saw the proliferation of countless "medical schools," springing up, as did their Greek predecessors, around practitioners. Some were very good and some were very bad, and all made money for their founders and faculty, since very little outlay of cash was involved. Steps were finally taken by the AMA to regulate undergraduate medical education, and the Flexner report of 1910 established the ground rules for the AMA's accrediting body, the Council on Medical Education. In 1942 undergraduate medical education became a joint responsibility of the AMA and the Association of American Medical Colleges (AAMC) through their Liaison Committee on Medical Education (LCME).

Graduate Medical Education: The CCME and LCGME

Graduate medical education was pretty informal until relatively recent times. Most medical

graduates (including preceptees) simply hung out a shingle and began practice. From the Middle Ages on, however, there were a few hardy souls who were willing to endure relative privation and bone-wearying work to advance their knowledge and skills, and these men hired at little or no pay on with the great hospitals in European cities as house physicians and surgeons. Most of the better known American doctors received some training "abroad." Soon the hospitals associated with our eastern universities, prominently in Boston, New York and Philadelphia, became the training ground for most American doctors seeking additional training, but "going abroad" was considered "the thing to do" until World War I dropped its bomb on European medicine.

Internships slowly came to be required by licensing boards for practice in most states, and internship accreditation was carried out solely by the AMA. Residency program accreditation was a hodge-podge, carried out under various Residency Review Committees having representation from the AMA, the specialty societies, and specialty boards. Following the Millis Report of 1966 steps were taken to organize these fragmented activities, and in 1972 the Coordinating Council on Medical Education (CCME) was established by the five major medical organizations having the greatest involvement and interest in medical education: the AMA, the American Board of Medical Specialties (ABMS), the American Hospital Association (AHA), the Association of American Medical Colleges (AAMC), and the Council of Medical Specialty Societies (CMSS). Soon its component for graduate medical education, the Liaison Committee for Graduate Medical Education (LCGME), began to function as the accrediting body.

A discussion of the CCME and its various components is outside the scope of this paper. If you are interested, you should consult Nesbitt's fine paper on the subject.¹ We are concerned here with the step-child and Johnny-come-lately of the education continuum, continuing medical education.

*Chairman, TMA Committee on Continuing Medical Education and member of the AMA Council on Continuing Physician Education.

Continuing Medical Education

Contrary to popular belief, in which the populace has been encouraged by parts of the media and by various individuals and agencies in the Federal government, most doctors have always engaged, to a greater or lesser degree, in educational activities throughout their professional career. Because much of this has been informal, and therefore not visible to public snoopers, word got around that doctors got their degrees and licenses and quit learning. There are, of course, unfortunate and often highly visible individual instances in which this is almost true. But few doctors go through a week without a consultation, which can be the most rewarding of all forms of education. It is also true that conventions are often play-times, but more often they are not, and doctors have always been inveterate meeting goers. They read journals, refer to texts (on which a considerable part of their income is spent) and attend staff and medical society meetings. Most do indeed continue, and continue adequately, their education, though some in the more inaccessible rural areas find it difficult to do so.

Much of our problem stems from the information explosion which has occurred since the turn of the century, but particularly since World War II. Because it has become virtually impossible to learn, let alone keep up with, everything even in a specialty, super-specialization has resulted, leading to further problems with the public.

CME at the local level has been spotty at best. A few states, most notably Kansas, have had excellent outreach through the medical school to rural practitioners. Specialty societies generally have maintained education opportunities for their constituents both nationally and at least regionally, and most medical schools have made local provision for post-graduate courses. About 20 years ago TMA put on a circuit-riding effort in conjunction with the medical schools, but the return was rather meager for the effort involved. The problem was largely one of having a program which would interest enough people in a specialized medical society.

The Millis Report, and several subsequent reports, put the handwriting on the wall, and governmental agencies began to get into the act. In 1967 the President's National Advisory Committee on Health Manpower recommended that

"state societies and state government should explore the possibility of periodic relicensure of physicians and other health professionals. Relicensure should be granted either upon certification of acceptable performance in continuing education programs or upon the basis of challenge examination in the practitioner's specialty."

In response to this stated policy of government, state licensing boards and medical societies reacted in various ways. First New Mexico and subsequently 14 other states enacted legislation requiring evidence of either CME or competency for continued licensure. As of January 1977 this has been implemented in 11 out of the 15. Thirteen other states followed Oregon in requiring CME for membership in the state medical society. Mandatory CME had come of age.

The TMA Committee on CME

Tennessee opted, and has to this point continued to opt, for the carrot rather than the stick. An ad hoc Committee on Continuing Medical Education was appointed in 1968 with Dr. Rudolph Kampmeier as chairman. The following year it became a standing committee, and the author became chairman in 1970. The committee's recommendation was that physicians be encouraged to qualify for the AMA Physician's Recognition Award (PRA), which requires 150 hours of approved activity every three years, and that community hospitals be encouraged to seek approval of their CME programs for Category IV credit, which was the only allowable credit at that time.

In 1971 the AMA discontinued accrediting local programs and placed the burden of local accreditation on the state societies, continuing themselves to accredit only medical schools and programs or institutions involving three or more states. In March 1972 your TMA committee received approval from the AMA Council on Medical Education, as the second state after California, to conduct its own accreditation program. It was recognized that such an accreditation program was a physical impossibility for a voluntary committee, and in October, 1972, Mr. James Ingram joined the TMA staff as Director of CME (DCME) to function under the direction of the committee.

Over the years, there has been a subtle change in direction in AMA philosophy concerning its accreditation program. This change, while not particularly to the liking of many of us who have

been in the program from the beginning, has been made necessary by the hard facts.

It has been recognized from the beginning by all concerned that if a physician is to be required to fulfill requirements of CME, educational opportunities must be made available close to his practice. It was for this reason that the state programs were set up to accredit and to send recommendations to the Council on Medical Education for their action in turn. Because of the desire to get community hospitals involved, site visit teams were encouraged to be relatively lenient and to allow for the broadest possible construction on requirements so that any valid learning experience would qualify for approval as Category I. (For an explanation of the various categories, you should refer to the AMA informational pamphlet on the PRA.⁴)

A number of events have since occurred which have served to tighten surveys and to narrow the construction on requirements. One is the difficulty in documenting the value of engaging in most types of so-called educational activities. Another is the ready availability of the increasing number of high quality educational programs, and a third is the increasing importance of the PRA to legislative and professional bodies. A fourth is the formation and imminent operation of the Liaison Committee on Continuing Medical Education (LCCME).

Accreditation and the LCCME

The LCCME, formed in 1975, is the last component of the CCME to become operational.^{2,3} Whereas accreditation for CME has rested solely with the AMA's Council on Medical Education since it began this function ten years ago, other agencies have seats on the LCCME, and the Committee will soon be taking a hard look at the whole accreditation procedure. With that in mind, the AMA House of Delegates at its annual session in June, 1976 passed a resolution reaffirming its support of the accreditation program of the state medical societies, accreditation which had been tantamount to accreditation by the Council, and recommending that the LCCME continue to follow the recommendations of the state societies.

The Council's Advisory Committee on CME, which is advisory to the Council on matters of CME, recognized that if the LCCME (made up, in addition to the 4 members from the AMA, of 3 members from the AAMC, 3 from the AHA, 3 from the ABMS, 3 from the CMSS, and one

each from the Association of Hospital Medical Education (AHME), the Federation of State Medical Boards (FSMB), the Federal Government, and the public) is to look with favor on this recommendation, the high quality of programs approved for Category I credit must be assiduously protected. It is anticipated that the LCCME will continue most of the procedures of the Council, which has to date accredited over 850 organizations and institutions, but it has not as yet agreed on its by-laws. Presumably it will commence functioning later this year.

It is necessary to remember that the CME Committee of the TMA, and through it the Council or the LCCME, accredits not individual programs, but accredits institutions or organizations to put on high quality programs. It is absolutely necessary, therefore, that the institution or organization have a responsible committee of its own which is not only able but willing to decide which of its programs are acceptable for Category I credit and which are not. Each accrediting agency down the line is responsible for the actions of the body or the program it approves and it is responsible for monitoring them to assure compliance with requirements. In today's political climate, this is mandatory, and the stated requirements must be met for each program designated Category I. I cannot emphasize strongly enough that not every program put on by an accredited institution will necessarily carry Category I approval. In fact it is expected that many will not.

Basic Requirements for Category I

Category I programs carry certain specific requirements which must be met,⁴ and it is incumbent upon the sponsoring institution or organization to ensure that they are. Some of these are:

1. The accredited organization must be sufficiently involved in the planning, development, administration, and evaluation of the program to assure that it meets the definition of a planned program, and must accept full responsibility for its educational value. It is inappropriate for an accredited organization to "rubber stamp" a program as an accredited co-sponsor.
2. A planned program, for the purposes of Category I credit, must present a body of knowledge in sufficient depth that the subject is comprehensively covered so as to meet the defined objectives.

3. The program must have a defined objective, and must be planned, coordinated, administered, *and evaluated* in terms of meeting that objective.
4. The objective must be aimed at giving a defined level of knowledge or specific performance skill. A series of unrelated lectures on different topics covering only one or two points in each topic would not qualify as a planned program.
5. To the extent possible, educational objectives should be based on demonstrated CME needs, as defined by practice profile, peer review, self assessment, or audit, or be designed to present a newly developed body of medical knowledge.
6. In all cases, proper evaluation must be carried out to determine how well the objectives were met. A "happiness index" derived from participant questionnaires is not adequate evaluation. Ultimately, it should depend on demonstrable impact on patient care.

Under certain circumstances, Category I credit may be obtained by use of audiovisual or other educational materials. It should be pointed out, because it is often lost sight of, that Category I programs are not in themselves necessarily "better" than programs carrying other designations. Nor does it mean that institutions or organizations which have been accredited to put on Category I courses are necessarily "better" than those which have not. It simply means that these organizations have taken the trouble to voluntarily submit to meeting standardized requirements, and so Category I programs are simply programs which are put on by those accredited bodies, and they must by definition be designed to meet specific objectives. It is for this reason that a specified minimum number of hours in this category must be obtained. When this requirement has been satisfied, any other credit hours, including additional Category I hours, should be considered of equal value regardless of category.

CME — The Future

Well then, where are we in Tennessee in our effort to get CME to the practicing physician? A few hospitals and medical societies have received accreditation to put on Category I programs (and we are speaking here only of Category I. Credit

opportunities in other categories abound). The medical schools in the state are exploring avenues of service in this area, both individually and as a consortium. The possibility of expanding the network of Area Health Education Centers is a real one, but is inconclusive as of this writing.

The Executive Vice President of the AMA, Dr. James Sammons, recently stated that continuing medical education is a top priority activity of the AMA. The Council on Physician Education has been mandated to increase its activities far beyond the two national meetings, so that in 1976 nine regional CME programs were held in conjunction with state medical societies, specialty societies, and/or medical schools, utilizing medical school facilities for the teaching. Fifteen are to be held in 1977, and 23 are projected for 1978.

In addition the AMA Council is developing a sub-regional curriculum, with packages of two to four 3 hour Category I courses to be available to local hospital staffs, for which AMA would handle all the mechanics, such as promotion, registration, obtaining faculty, and printing and distributing syllabi, and would assume the risk of financing the project. Financing would be through a charge of \$10 per credit hour (\$30 per 3 hour course). The first of these courses is in production at the present time, and production will begin shortly on a second. It is projected that eventually many of the better courses now being presented at the regional meetings will be available on video-tape to medical staffs in their local setting. This would require only a sponsoring physician on the part of the medical staff, and the mechanics would be handled through TMA. More specific information will be forthcoming as the program develops.

In addition to the continuing medical education activities of medical organizations, there is a great deal of interest on our behalf by large numbers of other institutions and organizations. A great deal of commercial interest has been generated in continuing medical education, and such things as cruises, safaris, and so on have been developed with continuing medical education ostensibly the prime purpose, though you might have some difficulty in persuading your friendly tax auditor that such was indeed the case. By and large, these are money making ventures for their sponsors, either directly or indirectly. In any event, though they frequently have good medical teaching, unless they are sponsored by an accredited

organization or institution, they cannot carry Category I credit. This does not of course mean that you should not consider them in some other category, because many of them are quite good, but you should examine your reasons for choosing them and act appropriately.

There is also a lot of interest in our continuing medical education which borders onto meddling. The Miller and Fink Corporation, publishers of *Patient Care Magazine*, a year or so back assembled a group of representatives from professional organizations, specialty societies, medical schools, community hospitals, national and state governments, and the pharmaceutical industry under the title of the Alliance for Continuing Medical Education (ACME).² The ACME is an ad hoc informal assembly of persons brought together to discuss and attempt to resolve problems facing continuing medical education. They set up a group of task forces, culminating in a National Invitational Conference in Atlanta in the spring of 1976 where it was agreed (by them) that the Alliance should continue "as an interdisciplinary forum to focus attention on priorities and to spur national and local organizations to action," and that possibly in the future a fund would be established to coordinate research and disseminate results.

The Josiah Macy, Jr. Foundation in 1976 published the report of the Commission on Physicians for the Future, which focused on a variety of major issues bearing on national health needs, a part of which had to do with medical education in all its aspects. The foundation is presently exploring the formation of a national commission which would be an independent body with a full time staff of its own to look into all these things

and report yearly in a public document.

The federal government continues to have proprietary interest in your continued competence, and what effect all this activity and interest on the part of so many will have on your future is uncertain, as my crystal ball has suddenly fogged up. I think you can be sure it will be considerable. Because "it is acknowledged that hours of participation in CME cannot be used to assure that the physician needed the information taught, that it was learned correctly, retained or applied correctly, or that the physician's patient's received better care,"³ progressively more is being written as to the futility, if not indeed the folly, of mandatory CME. But the tide is not likely to turn soon, and the AMA is proceeding with plans for easy terminal input and complete computer storage of every physician's CME record. This will no doubt reach fruition in the near future, perhaps this year.

Your TMA CME Committee continues to be active in your behalf, and is anxious to bring to you what you need to satisfy your CME requirements, whatever the future may hold. We solicit your input, which along with your requests should be addressed to TMA to the attention of the DCME, Mr. Ingram.

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"We're using it as a substitute for shock therapy."

Accelerated Hypertension*

ARNO A. SCHOENBERGER, M.D.:

A 33-year-old black male was admitted to the W. F. Bowld Hospital on 31 Oct 75 with severe hypertension. Three weeks before admission he suffered from occipital and frontal headaches and tinnitus. A public health nurse, a friend of the family, took his blood pressure 4 days before admission and found it to be 220/150 mm Hg. He attended a clinic at another hospital from which he was transferred to the Clinical Research Center of the City of Memphis Hospital.

In the past he had frontal headaches relieved by Anacin,[®] and occasional dizzy spells upon bending over. However, he never sought medical attention and never had his blood pressure taken before the present illness.

Review of systems revealed a right sided congenital cataract and microphthalmia. He had mild rectal bleeding from hemorrhoids and nocturia for several weeks prior to admission.

There was a history of hypertension and cardiovascular disease in the family. The patient was a funeral home worker exposed to embalming fluids. He smoked an occasional cigarette and drank about one fifth of liquor a week.

Physical examination showed the blood pressure in the right arm to be 218/150/140 mm Hg, in the left arm 206/155/144 mm Hg. The pulse rate was 80 beats per min, temperature 98°F, respiratory rate 18 per min. Weight was 203¼ lbs., height 67½ in. The general impression was that of a muscular, mildly obese, black male in no distress. Examination of the eyes revealed a congenital cataract and hypoplastic globe on the right. The left retina disclosed a flat disc, some arteriolar narrowing but a normal A/V ratio, and no hemorrhages or exudates. The carotid pulse showed a fast upstroke with normal descent. There was a left ventricular lift and the point of maximum impulse was 2 cm to the left of the midclavicular line. There was a prominent S₄ gallop; S₁ was normal; S₂A was increased with S₂P physiologically separated from it. There was a grade I/IV early systolic murmur at the left sternal border which faded away with the Valsalva maneuver. The arterial systolic blood pressure of the lower extremities was the same as in the upper extremities.

Laboratory work-up showed a hematocrit of 39% with normal red blood cell indices. The white blood cells were 5800 per mm³ with a normal differential count; platelets were normal; and the ESR (Wintrobe) was 60 mm per hr. Urinalysis showed a specific gravity of 1.012, pH 6.5, protein 3+, but no hemoglobin, glucose or ketones. The sediment was first reported to

show 1-2 WBC/per HPF. Upon review, a few RBC casts, oval fat bodies and hyaline casts were noted also. The BUN was 15 mg per dl, creatinine 1.7 mg per dl, and the creatinine clearance 94 ml per min. Total serum protein was at the lower limits of normal; electrophoresis revealed decreased fractions of albumin and gamma globulin. LDH and CPK were moderately elevated. The serum uric acid was 9.9 mg per dl. Triglycerides were elevated to 438 mg per dl consistent with type IV hyperlipidemia. Chest X-ray showed the heart size to be at the upper limit of normal with a contour of left ventricular enlargement. The electrocardiogram displayed a normal sinus rhythm, an angle alpha of +45°, a deep Q₃, positional in origin, abnormal T-waves and the high voltage QRS criteria (maximum precordial R+S>4.0 mV) of left ventricular hypertrophy. The echocardiogram revealed a large left ventricular chamber with generalized hypertrophy of the walls.

The patient was first treated with nitroprusside infusion intravenously at a rate of 5 to 30 mg per min for three days and showed a prompt fall in blood pressure (Fig 1). He tolerated this well with only a slight increase in heart rate. On the third day he was started on hydralazine intramuscularly with the sodium nitroprusside being tapered rapidly. Adequate control of blood pressure thereafter was maintained with oral hydralazine alone. There was a decrease in creatinine clearance from 94 to 70 ml per min in the next week. Daily echocardiographic studies were made and during the second week further work-up was done for creatinuria, proteinuria and secondary causes of hypertension. The 24-hour urine for total protein was 5.6 to 6.5 gm. Determinations on the urine for sodium, vanilmandelic acid (VMA), potassium, and 17-hydroxy steroids were normal. Plasma renin activity (PRA) was within normal limits for the amount of sodium excreted in the urine. A rapid sequence IVP was within normal limits; the kidneys were normal in size. The FANA test for lupus was negative. Excretion of 5-hydroxy indole acetic acid (5-HIAA) was normal. Complement levels (C₃ and C₄) were normal as were the ASLO titer and the bleeding profile. A renal biopsy showed arteriolar nephrosclerosis and advanced focal glomerulosclerosis. The latter lesion probably accounted for the red cell casts, provided an explanation for the accelerated hypertension, and presaged a fairly rapid future deterioration of renal function.

At the end of the hospital stay, the patient's blood pressure was controlled at 140/90 mm Hg. He was discharged on a low salt, high protein diet and hydralazine 200 mg per day.

On a return visit several weeks after discharge, mild proteinuria and a diastolic blood pressure between 100 and 110 mm Hg was found. A diuretic (hydrochlorothiazide) was added to the medication.

*City of Memphis Hospital Case #595380
Presented 7 Jan 76

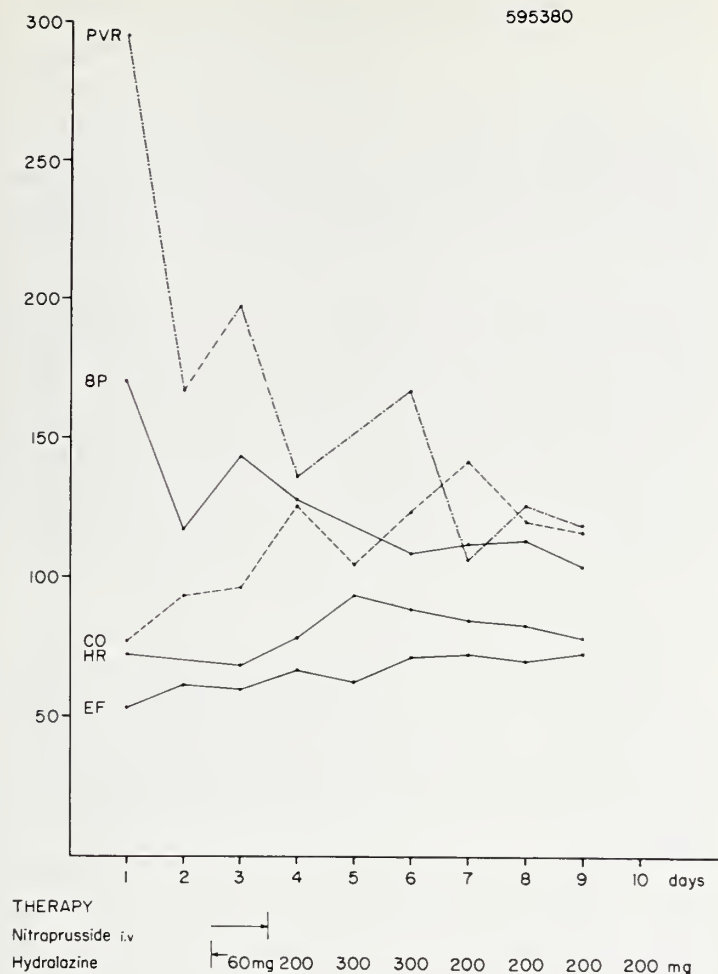


FIG. 1. Hemodynamic effects of vasodilator therapy in patient, with accelerated hypertension. Note prompt fall in peripheral vascular resistance (PVR, in dyne-sec-cm⁻⁵ x 10⁻¹). BP = mean arterial blood pressure (mmHg), C.O. = cardiac output in ml/sec, HR = heart rate in beats/minute, EF = ejection fraction in percent.

Discussion

JAY M. SULLIVAN, M.D.:

This patient represents a case of severe, accelerated hypertension who did not meet the usually accepted criteria for the diagnosis of malignant hypertension because his retinae did not show papilledema. At the time of admission the urinalysis suggested glomerular involvement subsequently confirmed by the renal biopsy.

You have seen in his case the different procedures performed in searching for the various secondary causes of hypertension. Rather than going into the reasons for all the different tests at this point, I want to begin by reviewing some of the features of *accelerated* and *malignant* hypertension and apply these to the way in which we are currently managing a patient of either sort.^{1,2}

Course

There are roughly 23 million Americans who have hypertension. This disorder frequently has an insidious onset, moderate blood pressure elevation which continues for years either without symptoms or with mild symptoms of headache, dizziness, or palpitations, and may progress to the development of cardiac hypertrophy, congestive heart failure, and coronary artery disease. Mild retinopathy is not infrequently seen, including A-V nicking, arteriolar narrowing, and tortuosity. Cerebrovascular accidents, either thrombotic or hemorrhagic, are common and renal function becomes somewhat impaired gradually.

Either *de novo*, or anywhere during the protracted course of benign essential hypertension, some 10 percent of patients will enter a *malignant* phase, either spontaneously or as a result of intercurrent renal disease. This phase is characterized by extreme elevation of blood pressure, progressive renal insufficiency with proteinuria and azotemia, cerebral edema, intracerebral hemorrhage, and advanced retinopathy. In addition to the retinal arteriolar narrowing and tortuosity during this phase there are soft exudates, flame-shaped hemorrhages and papilledema.³

In untreated hypertension changes take place within the cardiovascular system. Before the onset of the malignant phase, patients develop concentric hypertrophy of the left ventricle. The muscle works against a high afterload over the years. As the heart hypertrophies nothing very exciting happens to the chest film; a little bit of left ventricular prominence appears and the right ventricle usually remains normal in size because the left ventricle is doing all the work and has not yet failed. Pressures remain normal in the pulmonary veins and capillaries and in the pulmonary arteries, and right ventricular function is unimpaired. When the disease accelerates, things get worse. The left ventricle dilates and has to develop a very high tension in its wall which may exceed the ability of the coronary circulation to supply oxygen and substrates for contraction. In addition, the aortic ring may dilate and aortic insufficiency develop, the left atrium dilates as left ventricular diastolic pressure rises, and mural thrombi form. As the atria also dilate and fail to contract normally, additional thrombi can form. Atrial fibrillation, which occurs frequently, contributes to the intracardiac thrombogenesis. As the pressure rises in the left atrium, pulmonary veins, pulmonary capillaries, and pulmonary ar-

teries, the right ventricle enlarges and eventually fails. Generalized cardiomegaly, some pleural effusion and pulmonary congestion are seen on a roentgenogram of the chest at this stage.

Renal Morbidity

Untreated hypertension can also cause renal damage. I want to contrast the changes that one can see as a result of chronic hypertension, which might very well be present in a patient presenting in the malignant phase, with superimposed changes of the malignant phase. Just as one sees first hypertrophy of the heart then superimposed dilatation and failure, in the kidney one can see a comparable progressive deterioration of function. With time the renal arterioles develop fibrosis and hyalinization of the walls, impaired flow, and anatomic changes known as nephrosclerosis. These changes in the kidney are relatively fixed. Lowering the blood pressure retards progression of but doesn't erase them, so there is some impairment of renal function as the result of long standing, so-called benign, essential hypertension. With the onset of the malignant phase another type of morbidity develops which is termed fibrinoid necrosis of the renal arterioles. This lesion consists of the deposition of fibrinoid material throughout the media of the small arteries with necrosis of vascular muscle fibers, and inflammatory reaction and intense proliferation of connective tissue cells. Thus, a lesion develops whereby the vessel becomes partially occluded. Lowering the blood pressure in a patient with malignant hypertension will allow the lesion to resolve in part, healing over a period of about two weeks.

Clinical Manifestations and Outlook

The symptoms in a patient with malignant hypertension can be relatively unimpressive, which shows the importance of measuring the blood pressure. In the days before effective anti-hypertensive treatment was available visual impairment was present in 79 cases of a series of 105; acute headaches in 6, hematuria in 5, hematuria plus visual impairment in 3, acute cardiac failure in 1, nausea, vomiting and upper gastric pain in 1, and very vague symptoms in one. The last might easily and inadvertently have resulted in the patient being given an appointment to return to the clinic in about 3 months had not the pressure been measured.

The majority of the untreated series of 105

patients followed by McMichael and Murphy⁴ were dead within 4 to 6 months. When autopsied, 42 percent of them had essential hypertension. The majority of those with secondary causes for hypertension had renal disease: chronic pyelonephritis in 20 percent, chronic glomerulonephritis in 15 percent. Polyarteritis nodosa was rather frequent, close to 5 percent. Unilateral renal artery disease was present in 3.2 percent. Other causes of hypertension were relatively rare. Without treatment, the prognosis clearly is poor.

Figure 2 shows the survival time, in years, of untreated and treated patients.⁵ Among the former most died in less than one year. With treat-

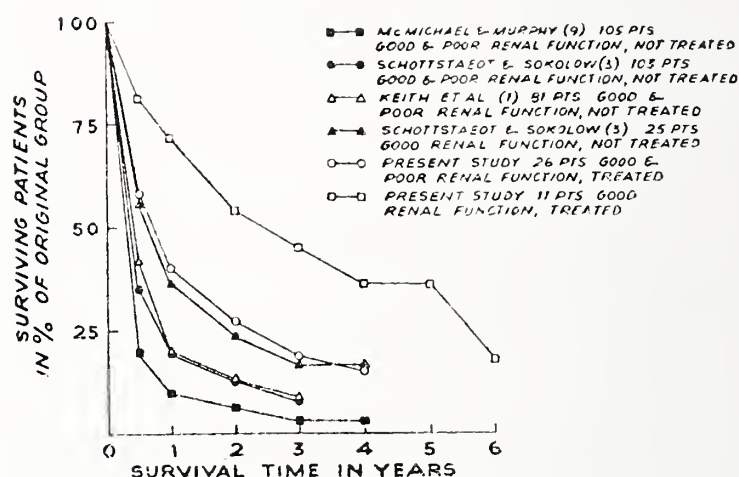


FIG. 2. Comparison of survival in groups of patients with good and poor renal function, treated and untreated. (From Sokolow and Perloff, *Am. J. Cardiol.* 6:850, 1960).⁵

ment, survival improved considerably. How much benefit will be derived from treatment depends in part upon renal function at the start of therapy.⁶ We talked about the nephrosclerotic lesions that can be present when treatment is begun and the fibrinoid necrosis which can be superimposed in the malignant phase. Let's say you start treatment not knowing which is which, not having the results of renal biopsy in the emergency ward, but the patient has a creatinine clearance greater than 45 ml per min. Patient survival is pretty good over the next several years. Contrast this with patients whose creatinine clearance has already fallen to beneath 45 ml per min; survival time is short. Clearly, new approaches are needed to prevent renal function from deteriorating before and during the acute phase of treatment. Parenthetically, this is the focus of some of our recent research.

The Renin-Angiotensin-Aldosterone System in Hypertension

During the development of accelerated or malignant hypertension, the reninangiotensin-aldosterone system becomes involved. Figure 3 briefly presents the operation of this system. As

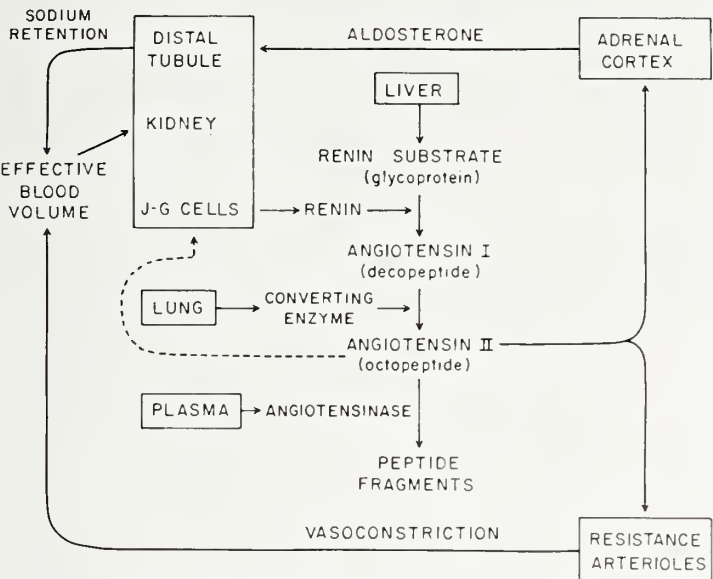


FIG. 3. Role of the renin-angiotensin-aldosterone system in regulation of effective blood volume.

blood pressure or sodium delivery falls, the juxtaglomerular apparatus within the kidney releases an enzyme, renin, which acts on a glycoprotein in the blood, renin substrate, to form angiotensin I. This peptide is split as it goes through the lung to form angiotensin II which is an 8-amino acid chain with two major functions: First, it is a potent vasoconstrictor which causes vascular resistance to go up and, second, it stimulates the adrenal cortex to release aldosterone which in turn causes salt retention, builds up blood volume, and signals the juxtaglomerular apparatus that the effective blood volume has been restored. Renin release then shuts off. With malignant hypertension, or with arteriosclerotic involvement of the renal arteries causing significant stenosis, the juxtaglomerular cells continuously get the deficient pressure-volume signal. They keep releasing renin, aldosterone is secreted, angiotensin levels climb causing increased constriction of the peripheral vasculature, and salt and water are retained making angiotensin even more effective. The blood pressure keeps going up but somehow does not feed back to turn off the juxtaglomerular cells because as a result of disease within the kidneys or in the renal arteries the cells are not being perfused. One of the hallmarks of malignant hypertension and of a few other forms of hyper-

tension is high plasma renin activity (PRA). Suffice it to say for the present that there are subgroups with low PRA, the prime example being primary aldosteronism, and some with normal PRA. Most patients with ordinary essential hypertension are in the normal PRA category, and those with malignant or severe hypertension or with renal artery stenosis are in the high PRA category. Because the renin in the latter, and thus the angiotensin, are elevated and the patient is in a vasoconstricted state, it seems reasonable to believe that if therapy were directed toward reducing renin levels, thereby reducing plasma angiotensin II and vasoconstriction, that this treatment would be ideal for the malignant phase of hypertension.

Physiologic Considerations in Therapy

Any of the drugs which block the sympathetic nervous system will impede renin release. Propranolol will decrease renin release, as will reserpine, methyldopa and guanethidine. It has been shown that patients with the highest renin activity will

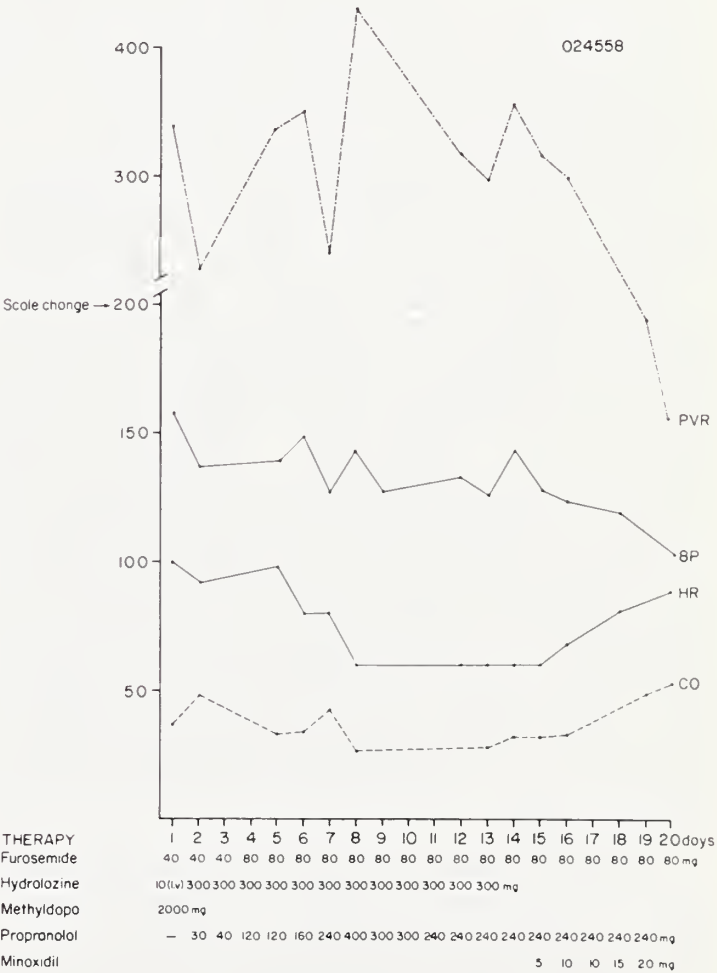


FIG. 4. Effect of sequential therapy with propranolol, followed by minoxidil, on the hemodynamic status of a patient with accelerated hypertension. Symbols and units of measurement as in Figure 1.

have the greatest drop in blood pressure when given propranolol. Because patients with malignant hypertension have high PRA, propranolol might be a good agent to use in their treatment. As part of a research project, Dr. Ratts, Dr. Mance, Dr. Johnson and I have used propranolol to treat a patient with malignant hypertension who was treated initially with hydralazine. Figure 4 shows the daily blood pressure, heart rate, cardiac output measured by echocardiography, and calculated peripheral vascular resistance. The initial response to vasodilators was good. Blood pressure fell, resistance fell, and cardiac output went up as the afterload was taken off the heart. Then, because the pressure didn't stay well controlled, we added propranolol and increased the dose of diuretics.

The major effect of this combination was a fall in heart rate, and cardiac output, while peripheral resistance did not return to normal until minoxidil, a potent vasodilator, was added. If you consider the arterial renal, cerebral, and myocardial lesions of malignant hypertension, you might conclude that if you use drugs which keep peripheral resistance up or let it climb higher (as a result of the baroreceptor reflex) and drop cardiac output at the same time, then you are not going to be perfusing peripheral tissues very effectively.

This year Dr. Schoeneberger, Dr. Ratts and I have been studying this problem in more detail. Figure 5 shows data on a patient we studied in a similar way who, when first admitted, was treated with furosemide and trimethaphan (Arfonad®) and placed on methyldopa while furosemide was continued. This is conventional therapy and the patient had a perfectly good response. His blood pressure came down and his hospital record looked fine. However, when echocardiography was performed, we found that we had lowered his cardiac output as a result of a reduction in both heart rate and ejection fraction, but the peripheral resistance had actually climbed. The patient might go home with a good blood pressure but a potentially unfavorable hemodynamic state.

We have tried to rethink this problem looking again at the factors that determine blood pressure. The hemodynamic expression of Ohm's Law is that blood pressure is the product of cardiac output and peripheral vascular resistance. Much of what we have been doing in our customary therapy of malignant hypertension, however, has been concerned with reducing cardiac output

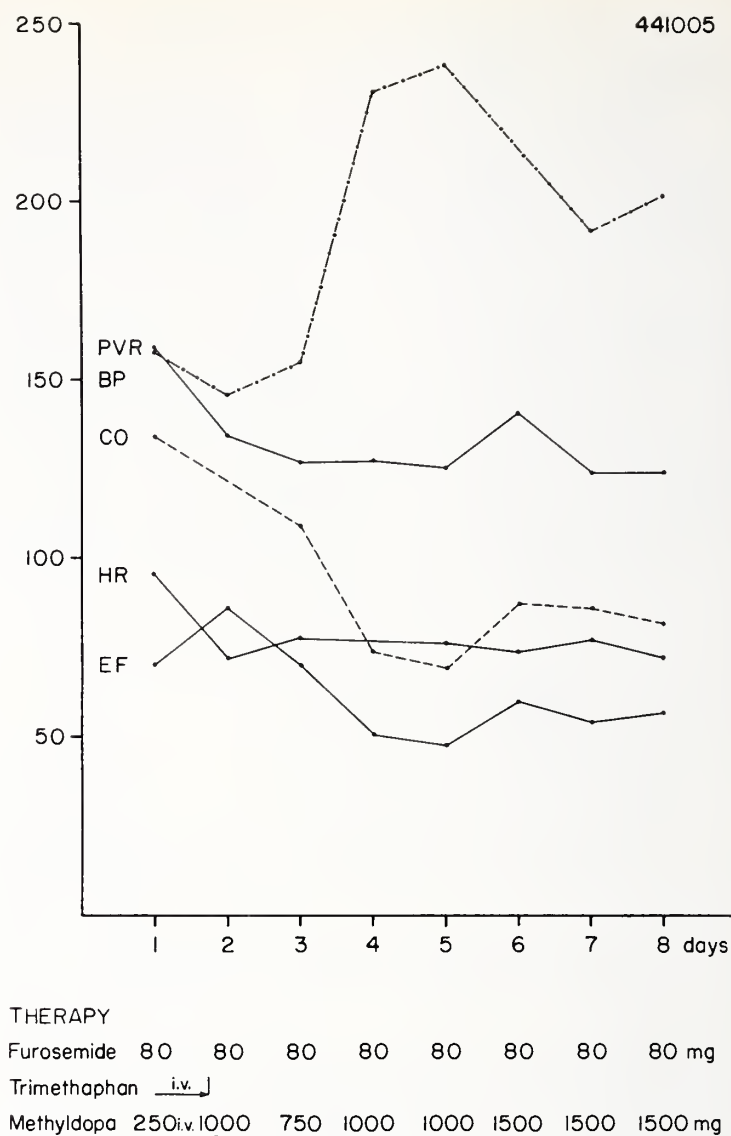


FIG. 5. Effect of diuretic and sympatholytic therapy on hemodynamic status of a patient with accelerated hypertension. Symbols and units of measurements as in Figure 1.

rather than resistance. We produce vigorous diuresis, drop blood volume and venous return and, in turn, cardiac output. Then we add compounds like propranolol to slow the heart rate and interfere with myocardial contractility. Much of the reduction of the blood pressure to therapy is obtained in this way but without lowering peripheral vascular resistance.

In studies at the Cleveland Clinic, examination of the hemodynamic profile of various forms of hypertension showed that people with normal or mild essential hypertension have, in addition to an increased blood pressure, an increased heart rate, sometimes an increased but usually a normal cardiac output, and an increased peripheral vascular resistance.⁷ The severely hypertensive patients have a high blood pressure and rapid heart rate but a cardiac output which is low and a peripheral resistance that is high. Theoretically, vascular resistance can be lowered by suppressing

renin activity and thus lowering angiotensin II levels, or by the use of directly acting vasodilators.

We have available at present three direct-acting vasodilators that can be given parenterally, one of which can also be given orally.⁸ Hydralazine, sodium nitroprusside and diazoxide all lower blood pressure. Hydralazine usually results in a reflex increase in cardiac output which makes it somewhat dangerous to give to someone with coronary disease because the heart has to work harder. Diazoxide does the same thing by dropping resistance. Nitroprusside tends to cause either no change in cardiac output or to alter it very slightly up or down. The reason is that nitroprusside also causes venous pooling with decreased venous return to the heart. All three drugs lower peripheral vascular resistance instead of causing a reflex increase. None affect renal blood flow nor glomerular filtration rate adversely and all tend to drop renal vascular resistance. Nitroprusside has favorable effects on the heart by decreasing the mean systemic pressure (afterload) and the radius of the left ventricle (cardiac dilatation is decreased). Since tension is the product of pressure and the radius of the involved chamber (the La Place relationship), intramyocardial tension and myocardial oxygen consumption are reduced. Pulmonary capillary pressure falls and pulmonary edema, if present, improves as the afterload is reduced. Stroke volume increases as does tissue perfusion. Because the heart is smaller and working against less pressure, it requires less oxygen, and myocardial efficiency and function are improved.

We carried out the same kind of study on the patient presented today. When he first came in, he received nitroprusside only, which brought his resistance and pressure down (Fig. 1) while the cardiac output climbed slightly. He was then placed on chronic hydralazine therapy, 300 mg per day to start and later reduced to 200 mg per day. (If you give this drug chronically in doses larger than 200 mg a day, you run the risk of precipitating a reversible lupus syndrome.) With time, the patient's resistance returned to a normal level, the blood pressure returned to a good level, cardiac output climbed but not overly so, the heart rate stayed about the same and the ejection fraction increased. Hemodynamically he was doing a lot better.

This case was managed without diuretics. I don't want to convey the impression that diuretics

should not be used at all. If a patient presents with heart failure, pulmonary edema and accelerated hypertension, judicious use of diuretics is indicated. If someone is going to receive a compound like diazoxide, which tends to cause retention of sodium and water when used in multiple doses, then it is essential to administer appropriate doses of diuretics during the time the patient is receiving the diazoxide. When he went back to work, increased his activity and started following his regular diet, which probably contained more salt than we were giving him, the patient required a diuretic for chronic blood pressure control. The vasodilator alone wasn't potent enough for chronic therapy but appeared beneficial in the first week or so of therapy of a patient who presented during an accelerated or malignant phase.

Recommended Emergency Therapy

With this background we can now focus on what constitutes desirable therapy for various types of hypertensive emergencies. If a patient presents in the age group in which you would not expect coronary disease or severe cerebrovascular disease, who has typical hypertensive encephalopathy, whose diastolic pressure is above 140 or 150 mm Hg, with a retina showing papilledema, hemorrhage and exudates, and who is actually having severe CNS manifestations such as localizing signs or actual seizures, then I think the thing to do is to get the pressure down promptly.³ You can do this two ways. If I were in the emergency ward and handling the patient, I would draw up a syringe full of diazoxide, 300 mg, and inject it rapidly intravenously. The pressure should fall within 5 minutes. If it doesn't fall by half an hour, I would repeat the dose. It is equally acceptable to start the patient on a nitroprusside drip if it can be started promptly and if there are people in attendance to stay and regulate the infusion. The mistake that we see being made is someone reasoning, "Well, I think nitroprusside is better than diazoxide because you can control the pressure more precisely." I agree with that. But you can't give nitroprusside unless you have the patient under constant cardiodynamic monitoring. Therefore, nitroprusside should not be started until the patient is admitted to the Intensive Care Unit or Coronary Care Unit. But, if a bed is not immediately available in either of those units, treatment might be held up several hours, a hazardous and unjustified delay. The therapist should not fall into that kind of trap. If the pa-

tient has severe encephalopathy, get treatment started at once.

A patient with accelerated hypertension, Grade III or IV fundi, and deteriorating renal function, and who does not have severe encephalopathy, can wait a short time while arrangements are made to reduce the pressure with a precisely controlled infusion of nitroprusside, which I think is the best agent for treating such a patient. Acute pulmonary edema secondary to hypertensive heart disease is a situation where nitroprusside can be ideal as it lowers pressure without causing the heart to increase its work load.

In eclampsia and pre-eclampsia, parenteral magnesium sulfate is still excellent and effective therapy. In the cases of pheochromocytoma the worst thing one can do, other than miss the diagnosis, is to give ganglion blocking agents which only make the patient more sensitive to circulating catecholamines. Such patients should be given an alpha-adrenergic blocking agent, phentolamine, 5 mg IV stat, repeating the dose as often as is needed to control blood pressure.

Dissecting or leaking aneurysms should be treated promptly. Appropriate medical therapy consists of lowering the pressure in a controlled fashion by an agent which does not increase the force of myocardial contraction, either trimethaphan or nitroprusside, with a small dose of propranolol e.g., 1 mg, I.V., provided the patient does not have asthma, heart block or congestive heart failure.

In the treatment of cerebral or subarachnoid hemorrhage, nitroprusside is a very good drug as it allows the pressure to be lowered gradually and maintained at precise levels—at normal levels in someone who has a ruptured aneurysm and at levels of around a diastolic of 110 mm Hg, in someone who has a definite intracerebral hemorrhage.

New patients with a blood pressure of 200/150 mm Hg don't always represent an emergency, but you don't know whether the individual patient is accelerating or not, so close observation is necessary. This is not the person who should get diazoxide; he may do well with rest, sedation, and a program of oral antihypertensive agents. But he must stay under observation because you don't know whether the pressure is on the way up or on the way down.

Charles E. Kossmann, M.D., Editor

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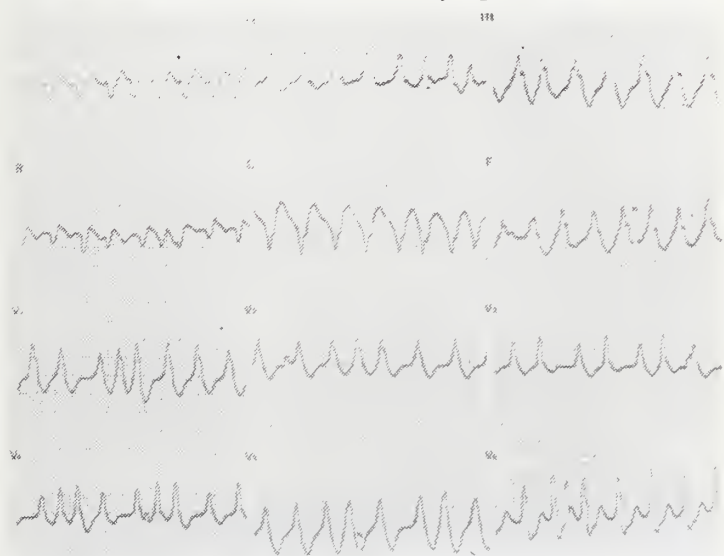


"I'll give it to you straight . . . You have a Super-Hernia . . ."

TMA EKG of the month

HISTORY

A 40-year-old man who had been in excellent health was admitted to the Emergency Room following the onset of "weakness." He was alert and well oriented as to person, place, and time. He was afebrile. His skin was warm and dry and his color was excellent. Blood pressure was 115/70 supine. His pulse was irregularly irregular and the radial pulse was 110 per minute. Auscultation revealed varying intensity of the



Discussion

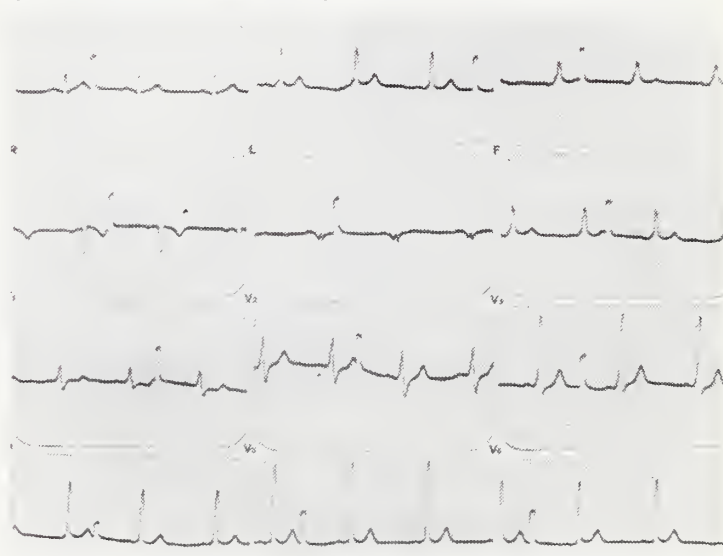
Fig. 1 shows an irregular rhythm with a ventricular rate varying from a cycle length of 0.4 sec. to 0.20 sec. The QRS forces are extremely rightward and anterior. The marked irregularity and stability of this rhythm over prolonged period of time strongly suggests that the tracing represents atrial fibrillation with a very rapid ventricular response and a resultant right bundle branch block pattern. Following direct current cardioversion, delta waves can be plainly visualized in leads 2, 3, AVF, and in V3 and V4. The PR interval in standard lead 2 is 0.10 sec. Note that the predominant deflection in V1 is upright. This tracing represents pre-excitation syndrome and the anterior forces in V1 and V2 allow for classification as Type A pre-excitation (Rosenbaum, et al).¹

Although pre-excitation syndrome is usually considered compatible with a normal life span, a small but real incidence of sudden death has been reported (Dreifus, et al).² This results from ventricular fibrillation which may often be precipitated by atrial fibrillation with extremely rapid ventricular response (cycle length approximating

From The Department of Cardiology, Saint Thomas Hospital, Nashville, Tenn. 37205.

first sound. No murmurs could be appreciated. The following electrocardiogram was taken. (Fig. 1)

He was hospitalized and given intravenous Oubain totaling 1.2 mg. over the next six hours, and was sedated with IV morphine. His ventricular rate continued at about 250/minute. Carotid sinus massage and Valsalva maneuver produced no slowing of his ventricular rate. Inderal (4mgm IV over a period of 20 minutes) produced no notable slowing. Because of the persistence of his rapid ventricular response he was given 20 mg. of Valium and 100 mg. of Dilantin intravenously. A single 300 watt-second direct current synchronized shock was administered. The following electrocardiogram was obtained. (Fig. 2)



0.36 sec. or less). It has been noted that digitalis may have little effect on atrial fibrillation in the presence of Wolff-Parkinson-White syndrome and may be contraindicated as it suppresses conduction over AV nodal pathways. It may also enhance accessory pathway conduction.

It is of interest that this patient had no slowing of ventricular rate in spite of relatively large doses of intravenous Oubain. Some patients with electrocardioverted pre-excitation have been noted to have asymmetric septal hypertrophy. An echocardiogram carried out on this patient showed no thickening of the ventricular septum.

Final Diagnosis

Atrial fibrillation with rapid ventricular response and right bundle branch block in the presence of pre-excitation syndrome (Wolff-Parkinson-White syndrome).

W. Barton Campbell, M.D.

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REGIONAL INFECTION CONTROL

A regional infection control program has been in operation for one year. Developed under private auspices, it serves 13 hospitals in Tennessee, Georgia and Kentucky with a combined total of 1703 hospital beds. Eight of the hospitals are in rural communities.

The program is staffed by two full-time nurse epidemiologists and one full-time medical records technician. Part-time consultation is provided by a clinical microbiologist, an infectious disease specialist and two clinical pathologists. The program director is a clinical pathologist.

Continuous intensive auditing of (1) the diagnosis and management of all infections, (2) the use of antibiotics, (3) the relevance of laboratory microbiology, and (4) the epidemiologic aspects of hospital associated infections is provided retrospectively. Monthly reports present all details to the infection control committees of each institution with recommendations for action.

The program also provides limited environmental surveillance, programmed in-service training designed for the special needs at each institution and limited double-blind peer review.

In 2111 patients, 2316 episodes of in-patient infections have been analyzed during a period in which 40,343 discharges took place. Based on the combined use of clinical and laboratory criteria, 45.5 percent of these presented insufficient evidence to be classified as bacterial infections, yet 70 percent received antibiotics. A pilot survey at two institutions revealed that 42.9 percent of all admissions received antibiotics during their hospital stay.

In the remaining 1276 cases of bacterial infection, 15.1 percent were hospital associated. Genitourinary tract infections accounted for 41.9 percent, skin and subcutaneous infections 35.8 percent and the lower respiratory tract 15.5 percent in this group.

When the medical management of all bacterial infections are examined by standard criteria the following results are seen:

I. Use of antagonistics antibiotics 0.2%

From Clinical Laboratories of Nashville, Nashville, Tenn. 37203.

- II. Not treated at all 4.1%
- III. Infection not accessible for culturing but
 - (a) antibiotic selection, route & dose proper for body site 2.7%
 - (b) antibiotic selection, proper but route or dose improper 0.0%
- IV. Infection accessible to culturing, and there was
 - (a) culture of proper material, antibiotic selected by sensitivity testing, antibiotic selection proper for site with proper route and dose 47.7%
 - (b) culture of proper material, antibiotic selected by sensitivity testing, antibiotic selection proper for site but route and dose improper 0.3%
 - (c) culture of proper material, antibiotic selected by sensitivity testing, antibiotic selection improper for site 0.2%
 - (d) culture of proper material; antibiotic not selected by sensitivity testing 11.0%
 - (e) culture of proper material, no pathogen recovered, antibiotic selection proper for site and route and dose proper 15.2%
 - (f) no culture with antibiotic selection proper for site and route and dose proper 18.4%
 - (g) no culture, and antibiotic selection improper for site 1.3%

These data suggest that in our medical community, bacterial infections are generally well managed; however, a large percentage (19.7) are not cultured. The recorded data base for documenting the presence of bacterial infection is tending to be insufficient since a large percentage of cases studied (45.5) could not be classified, in retrospect, as bacterial infection.

Preliminary analysis of the data does not show differences in the management patterns between urban and rural hospitals.

Joseph J. Sannella, M.D.
Medical Director

Ultrasound of a Pheochromocytoma

For 2 years, this 62-year-old lady had symptoms of pounding headaches, tinnitus, nausea, and periodic episodes of weakness in her arms and legs lasting 5 to 10 minutes per attack. Her blood pressure was 116/70, pulse 80, respiration 18, temperature 98.6. Her physical examination was within normal limits. Initial studies in the hospital revealed normal electrolytes, SMA-12 chemical profile, Urinalysis, complete blood count, thyroid profile, chest x-ray, skull x-ray and brain scan. In the hospital hypertensive episodes (BP 220/130) and episodes of postural hypotension (BP recumbent 120/70, standing 50/30) were observed. A diabetic glucose tolerance test was also discovered. Twenty-four hour urinary catecholamines of 5650 ugm (normal <100 ugm) and vanilmandelic acid of 62.5 mgm (normal <10 mgm) established the diagnosis of



From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, Tenn. 37203.

pheochromocytoma. The IVP was essentially normal. Arteriograms revealed a 4cm vascular mass above the right kidney (Fig. 1). An Ultrasound study showed a 6cm right suprarenal mass extending into the kidney (Fig. 2).

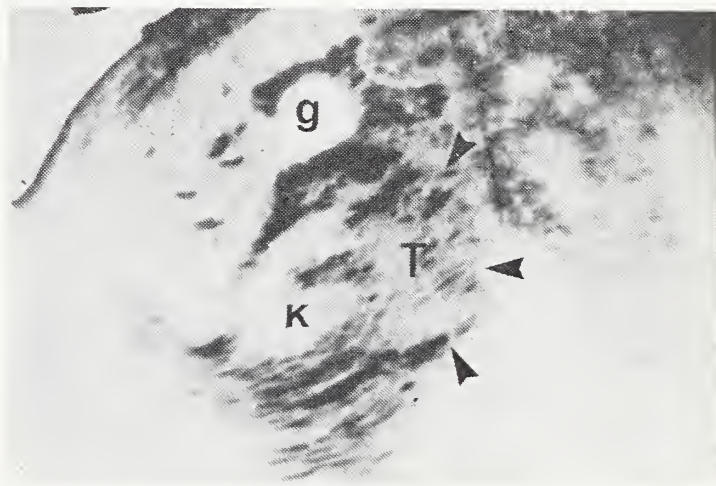


FIG. 2

K Kidney
T Tumor
G Gallbladder

At surgery, a 6 cm mass which extended into the kidney led to removal of the kidney and the mass. The tumor was a pheochromocytoma which demonstrated a positive chromaffin reaction and which showed very high levels of epinephrine and norepinephrine. A mass of granulation tissue between the tumor and kidney bound the two together.

This case demonstrates the difficulty of arriving at the correct diagnosis on the basis of the clinical symptoms. The postural hypotension and episodes of hypertension were critical observations which led to the examination of the urine for catecholamines and vanilmandelic acid. An aspect of this case that is new and unusual was the use of Ultrasound to localize and reveal some gross anatomical features of the tumor. The success here supports the experience of the Danish doctors¹ who contend that Ultrasound has been more helpful than aortography in localizing pheochromocytoma.

Robert L. Bell, M.D.
Douglas H. Riddell, M.D.

Reference

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Newborn/Perinatal Legislation

The Newborn Program was established in 1974 by Tennessee Code Annotated 53-127 to 53-130, and was funded in 1976 by a \$900,000 State appropriation.

The goals of the program are:

1. To reduce the Tennessee infant mortality rate (18/1000) which exceeds the national average (16/1000), and to decrease the number of compromised infants who require institutional and specialized care, and,

2. To develop a plan with assistance of the Newborn Advisory Committee for the implementation of regionalized newborn care on a statewide basis.

The University of Tennessee Memorial Research Hospital in Knoxville, Vanderbilt University Hospital in Nashville, and the City of Memphis Hospital each received \$250,000. T. C. Thompson Children's Hospital in Chattanooga received \$100,000. The remaining \$50,000 was retained by the Division of Perinatal Services, Tennessee Department of Public Health, for support of the newborn programs across the state.

These Regional Newborn Centers are using the funds, as specified by law, to provide services through the purchase of equipment for the diagnosis and treatment of high-risk newborn infants; development of rapid transportation to the newborn centers from throughout the region for those newborns requiring specialized care; employment of medical specialists to care for high-risk infants; and provision of educational activities and consultation for nursing and medical personnel in hospitals in their regions. A plan has been developed for the implementation of regionalized newborn care on a statewide basis. This plan provides for the designation of four regions in a system of delivery of intensive newborn care and the establishment of regional newborn intensive care centers (Level III centers) which serve a population between 1 and 1.5 million and provide the highest level of care available for newborn infants with a network of Level II and Level I centers referring cases to it. The plan also provides for the designation of Level II and Level I centers. Level II centers will provide a full range

of neonatal services for infants without complications and for certain types of neonatal illnesses except those requiring consultants and facilities not available at this level. Level I centers will provide a full range of neonatal services to normal newborn infants.

A perinatal bill has been written and will be introduced in the 90th General Assembly to extend the program from the newborn period to include the perinatal period (prenatal and newborn). This bill substitutes the word "perinatal" for "newborn" wherever it appears in TCA 53-127—53-130; includes in the program the care of pregnant women and their fetuses, in addition to newborn infants; and broadens the scope of the Advisory Committee to include pregnant women and their fetuses and increases the membership from nine to thirteen.

The ability to provide earlier intervention with a high-risk pregnant woman in the perinatal period either reduces totally or minimizes the damage to the mother, fetus or newborn infant. The number of complications to newborns, and consequently the number of mentally retarded children, will be reduced with vital fiscal implications. The goals of the perinatal program are:

1. To reduce the Tennessee maternal mortality rate (2.4/10,000) which exceeds the national average (1.9/10,000); to reduce the Tennessee infant mortality rate (18/1000) which exceeds the national average (16/1000); and to decrease the number of compromised infants which require institutional care and specialized care, and,

2. To develop a plan with assistance of a Perinatal Advisory Committee for the implementation of regionalized perinatal care on a statewide basis.

The establishment of a perinatal program in Tennessee will make accessible to every physician in the state a mechanism for consultation on high-risk pregnant women as well as newborn infants, for transfer of these patients if necessary to centers with special equipment and specially trained personnel in perinatal medicine, and for postgraduate courses in perinatal care provided by the Regional Centers.



tennessee department of mental health & mental retardation

Tennessee Mental Health Institutes

Effective January 1, 1977, the five major state operated facilities in Tennessee which provide mental health care were changed from "psychiatric hospitals" to "mental health institutes."

Officially, the new names are:

- Lakeshore Mental Health Institute in Knoxville (formerly Eastern State Psychiatric Hospital)
- Middle Tennessee Mental Health Institute in Nashville (formerly Central State Psychiatric Hospital)
- Western Mental Health Institute in Bolivar (formerly Western State Psychiatric Hospital)
- Moccasin Bend Mental Health Institute in Chattanooga (formerly Moccasin Bend Psychiatric Hospital)
- Memphis Mental Health Institute in Memphis (formerly Tennessee Psychiatric Hospital & Institute)

These changes were made to more adequately reflect the positive role these facilities play in the delivery of mental health services in Tennessee. Previously, the names of the major mental retardation facilities were changed from "hospital and schools" to "developmental centers." And last year, the Tennessee Department of Mental Health became the Tennessee Department of Mental Health and Mental Retardation.

For too long, our mental institutions were viewed as warehouses for human misery where little or no treatment was offered to patients. But in the 60's, Tennessee, like many other states, began to seek solutions to the problems of providing comprehensive treatment.

As recently as the late 60's the average population of our larger facilities numbered around 2,000. It was felt that many of the individuals in residence at these institutions could function in the community if conscientious effort was applied and alternatives of care were sought. Since the late 60's the census at our state operated facilities has been reduced to an average of approximately 1,000.

Although this reduction is due in part to direct efforts by the facility staffs, improvements have been in concert with other general movements within our Department, the first of which dealt with placing greater emphasis on community mental health centers as viable components in the service delivery system.

During the last five years, the number of operating community mental health facilities increased from 21 to 30. In that same period, several of these programs gained comprehensive status. State dollars flowing into the mental health centers have increased from under \$3 million in fiscal year 1971-72 to a present approximate of \$7 million for fiscal year 1976-77.

Along with additional monies the centers were given increased responsibility for the aftercare treatment of patients who were released from our mental health institutes. During the period between 1971 and 1973 the process of assigning a specific geographical catchment area to each center was completed, which meant that the community system was destined to play a more supportive role in the Department's continuity of care program.

Counties offering some level of mental health care within their geographic boundaries had increased from 26 in 1971 to 70 in 1976. In 1972, funds which had been previously allocated to the state hospitals were shifted to the community programs for support of aftercare functions.

Even today, we are planning a new funding policy which will enable a certain amount of state funds to be designated to follow the patient through a comprehensive treatment program. Our purpose, of course, is to lose no patient in the transition of institute to mental health center. This new per capita funding program is expected to be implemented at the beginning of the next fiscal year on July 1, 1977.

Emphasis was also placed on upgrading the quality of care offered by Tennessee's five mental health institutes and a program to earn accreditation from the Joint Commission on Accreditation of Hospitals was launched.

Each institute has incorporated some method

of identifying those patients who have potential for returning to the community. The primary separation which exists in each institute concerns patients requiring only acute care and those needing long term care. Since acute care can usually be provided by the mental health center system, separation of case types has become a focal point in the division of services.

Each institute has added strength to admission procedures and policies to eliminate unnecessary admissions. A good example is in reference to nursing care patients who for a lack of services have in the past been admitted to mental health institutes. All institutes now have policies and procedures prohibiting the admission of a clearly defined nursing care patient who can best be served by other programs.

It is significant, too, that the comprehensive model adopted by Tennessee is designed not only to serve the severe mental patient but through

early detection and treatment to prevent mental illness.

For this reason, all mental health institutes now offer specialized services above and beyond simple medical and psychiatric care. Each has a specialized program designed to provide marital, family, and pastoral services. Special programs for children, youth, and the elderly are important functions both in the mental health centers and institutes. Programs are available for treatment of the alcoholic and/or other drug abuser. Forensic care and special behavior modification programs are also provided.

Thus, in Tennessee, there has been a basic philosophical change within the Department of Mental Health and Mental Retardation. The names of our large institutions have been changed to more adequately communicate our current programs and our goals of providing comprehensive care for all our citizens.

* * *



The patient is a 31-year-old white male in good health except for right subcostal pain related to meals. The pain was described as dull and not crampy. The

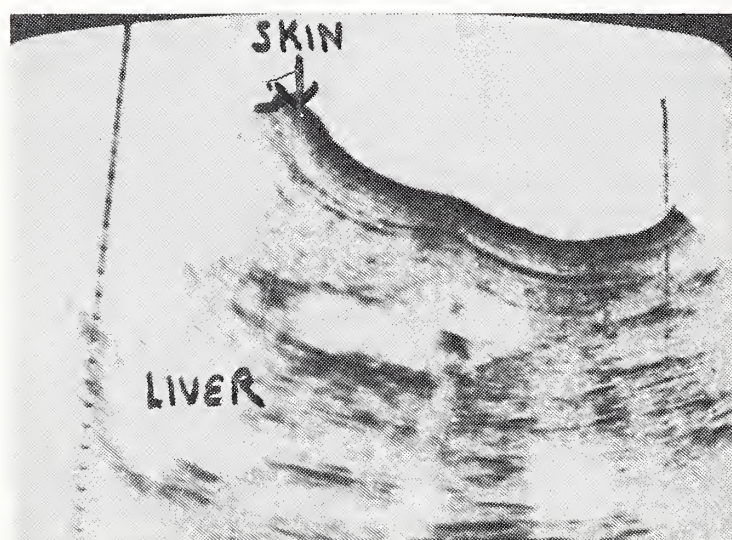


FIG. 1. Longitudinal (para-sagittal) Section, 8 cm. to right of midline. The electronic markers on the left of film mark the level of the xyphoid, and those on the right of the film mark the level of the umbilicus.

From The Vanderbilt University Hospital, Department of Radiology, Nashville, Tenn. 37232

physical examination was unremarkable, with no tenderness or mass. No jaundice was present.

X-ray: There was a non-visualizing gallbladder on oral cholecystogram even after repeat dose.

The patient was examined by ultrasound.

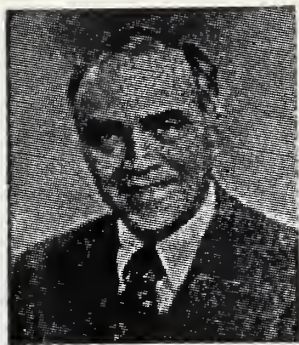
Discussion: The echo free area beneath the liver is the gallbladder. The heavy echoes within it represent two gallstones. Note that there is a cone-shaped shadow behind the gallstones representing an area of acoustic shadowing, or no sound transmission.

Ultrasound should be performed for examination *whenever* there is *non-visualization* or *poor visualization*. The only preparation is a low fat supper the night before and then nothing by mouth (including no smoking or chewing) after 10 p.m. Most people have had this preparation for the x-ray examination, and should be taken directly to ultrasound from the x-ray room if there is non-visualization.

Ultrasound will show stones in 3% of "X-ray normal" gallbladders. This is caused by stones of the same density as the contrast medium. Therefore, even with a normal cholecystogram, ultrasound examination should be done if symptoms are strongly suggestive.

Ultrasound can also be used to search for dilated bile ducts and stones in them.

David A. Krause, M.D.



C. GORDON PEERMAN, JR.

Countersuits

The medical profession is rather slowly and with general distaste turning to countersuits as a defense for the abuses suffered at the hands of unscrupulous patients and their attorneys. In the last ten to fifteen years there have been an escalating number of suits for medical malpractice brought against physicians. Far too many of these suits have been fishing exhibitions into the realm of the professional malpractice insurance. Although about 80% of the cases that get to court are found for the defendant physician, this has not slowed the increasing instance of suits, because of the occasional extremely large awards given the plaintiffs.

A countersuit is a separate suit brought in opposition to a suit which has been brought against a plaintiff. The countersuit may be filed before the original suit is decided and may be consolidated with the malpractice suit, or it may be filed after the decision is made on the original suit.

The amount of money necessary to defend suits in which no malpractice actually occurs, especially in poor results and malicious or frivolous suits, have begun to significantly affect the cost of medical care. In 1975, the actual cost per office visit was \$1.24 or 8.1% of the cost of the office visit. Also a brand of defensive medicine based on legal liability and not sound scientific judgment has evolved.

The medical profession and the Tennessee Medical Association has no interest in denying the patient's legitimate right to redress and recover when a malpractice has occurred. The time has now come to bring some order out of chaos and reason out of irrationality. As yet, there has been no legislative action that has relieved the problem, although we have hopes some progress is being made. In any event, the

right of the injured patient to sue and the right of the injured doctor to sue must in the final event be preserved.

In the past lawyers have complained that they have been unable to secure physicians to testify for their clients in court. Apparently it is also difficult for the physicians to find lawyers willing to sue other lawyers. This two-fold problem seems to be decreasing in severity and as a result a more reasonable situation where suits with real merit may be the only ones being brought to court. This in turn would relieve the terrible burden of trials that have hampered speedy judgment by the courts.

Recent developments and especially the Dr. Leonard Berlin case indicate that physicians may through countersuits, be able to reduce medical malpractice litigation to a reasonable incidence that coincides with the quality of medicine practiced in this country today. It is my opinion that the incidence of malpractice has been decreasing during the years that malpractice claims have actually been increasing.

The TMA has had an Ad Hoc Committee studying countersuits for frivolous or malicious legal actions brought against Tennessee physicians. California, Michigan, Illinois, and Georgia have established funds to aid physicians in their countersuits against malpractice plaintiffs and their attorneys. Tennessee has a Barritory Statute which has not been tested and may well be unconstitutional. However, care should be taken in how we approach countersuits in this state. Decision to countersue should be that of the physician after he understands all of the facts and has been advised by his attorney.

In Georgia each potential countersuit is reviewed by a Countersuit Committee, then the counsel. It is required that the physician defendant has won the suit, and a countersuit is recommended by the original defense counsel. The countersuit includes a suit against the original plaintiff and his attorney. The Countersuit Committee and the legal counsel of the Georgia Medical Association decides whether to assist financially in the countersuit. This decision must be upheld by the counsel who then advances the funds.

In 1901, the Canadian Medical Protective Association was formed for the mutual protection against legal actions claiming malpractice or negligence and was incorporated by an act of Parliament in 1913. At first, only legal advice was given the members, but later responsibility for the cost of defense of members was assumed. In 1932, the privileges of membership were extended to include payment of damages, legal fees, and court costs.

Consideration is now being given to the formation of a Tennessee Medical Protective Association which would have no connection or relation to the TMA. It would provide its members with legal assistance and advice, particularly in regard to countersuit. The State Volunteer Mutual Insurance Company will continue to defend its policy holders but it is in no position to become involved in other legal actions. The Association would have a Board of Directors who, with legal counsel, would recommend countersuits that have merit. Funds would then become available for legal expenses for the countersuit.

Doctors throughout the state would be advised when the Tennessee Medical Protective Association is formed and given opportunity to become members.

Sincerely,

C. Gordon Peerman, Jr., M.D.

PRESIDENT

**President's
page**

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FEBRUARY, 1977

editorials

Continuing Medical Education

The winds of change are blowing through the CME program, locally and nationwide, brought on by intensified government activity to be sure we're all competent. While that is surely much to be desired, Big Brother is unlikely to go about it in either a logical or a reasonable way. But whether or no, we have to abide by it.

I have attempted, in an article in the front part of this issue, to bring you up to date on the situation—as up to date as my smudged crystal ball will allow. I am not being immodest in saying it is required reading. It is a quasi-official pronouncement of your CME Committee, embellished in my own inimitable style.

Read it—and weep, or laugh, or do whatever, within reason, you feel it impels you to do. But read it.

J.B.T.

On Preventive Medicine

When I was a senior medical student we had a course called "Preventive Medicine and Public Health," which, content-wise, was just barely bearable, but which was made fairly interesting by some superb teaching by such men as the late Drs. Alvin Keller and Bill Frye. To us, preventive medicine was synonymous with sewage disposal, water purification, and shots. Except for the time, shortly thereafter, when I was medical inspector on an air base, it was years before I gave it another thought. After all, doctors treat sick people. Public health types worry about prevention.

The illogic of that line of thinking should be immediately apparent, but unfortunately it isn't. The public, though, is forcing interest in preventive medicine on us, and rightly so. It is odd that we should agree that "an ounce of prevention is worth a pound of cure" in such things as insurance, automobile maintenance and so on, and yet ignore it in the human machine. But that's the way our minds work—anything to get out of something dull.

The thing is that properly understood it isn't dull. It's the stuff of which medicine is made, and this has never been better demonstrated than in the elegant little study by Alan Graber, printed in this issue of the JOURNAL. There is so much we can do in the context of our practice to improve the health of our patients without waiting until they get sick. It may take some education, but most of us pride ourselves in how well we can teach medical students and house staff. Why not patients? Or better still, why not non-patients?

Why not preventive medicine? Its title gives it away. *It's* medicine, too.

J.B.T.

To Be or Not To Be...

... *Then would I hail the moment fleeting,
"Yet still delay—Thou art so fair."
Goethe, Faust*

Harry Schwartz, that unexpected defender of Medicine at the *New York Times*, said that what the average citizen wants from Medicine is to live forever with full sexual powers at no cost to himself. This speaks in a pragmatic way to

the more general rights mentioned by the framers of our Constitution: life, liberty, and the pursuit of happiness. It does so, however, in an unrealistic way, and no one has considered it a practical wish—that is, not until recently.

People, particularly some in the media and in government, keep putting it into our heads that these desires of ours just might be attainable. For example, a segment of the *Today Show* recently had a large banner on the wall for one of its interviews which read *ProLongevity*. It involved a discussion with a scientist concerning our biological clock which at the moment of our birth is set for the moment of our death, barring unforeseen accidents. It involved the process of aging, and the thesis was that science is on the verge of unlocking the secret of this biological clock so as to be able to turn off its self destruct mechanism.

This speaks to length of life, and presumably, if you could stop the aging process, it would do a lot for the quality of life as well (the pursuit of happiness—translated “full sexual powers”). It would do nothing for the unforeseen accident, though, and although we have gone a long way toward solving some of the medical accidents, a lot of other accident sources have been added along the way. But who *wants* to live forever, anyhow?

The answer to that, of course, is, “It depends.”

We need from time to time to look at what we are trying to do as doctors. Should we really work toward keeping people alive forever? How many of our patients or even our “friends and relations,” really want it? Even if some of them, or even most of them, do, 99 out of a hundred inhabitants of this world hate their existence, whence the appeal of the Eastern religions, where the ultimate is to disappear into Nirvana, or else return to this world as something or someone else.

Is *everyone* to be kept alive forever if we develop the capability to do it (barring accidents)? If not, who decides who will receive that largesse? If so, where will we put them? We already have population problems: food, energy, effluent disposal, and so on. Those are problems for society, though, and even though we are a part of society, and must be concerned with its problems, in our role as doctors we cannot deal in generalities or with the masses, but must deal in particulars with individuals. Our calling is to do what is best for each indi-

vidual patient, remembering that each individual life was created by God for a purpose and is precious to Him. But there is, according to His word, “a time to live and a time to die.”

We need to concern ourselves more with the quality of the life we are preserving. We run the risk of “playing God” as much by unnaturally preserving a life as by arbitrarily ending it. Continued existence in this world is not always the desirable end, and sometimes we need to “let Nature take its course.”

This is neither a plea nor an argument for “euthanasia,” which is an active process, though the line here sometimes is very fine. It is both unfair and unwise to place the legal burden for the decision to “pull the plug” on the patient’s family, as some of the discussion in the Quinlan case, testimony in both the AMA and the TMA reference committees on problems of ethics, and arguments on the floor of the House of Delegates of both bodies, would require. Neither the family nor the patient have the background or the information to make the decision, and short of endowing them with the entire body of our own medical knowledge and experience, we cannot give it to them. But when the end is in sight, most patients, and their families, have a pretty good idea of the conditions under which they would or would not desire to continue to live, and they will tell us, if we listen. Because they either do not know how to verbalize it, or perhaps because they are reluctant or even afraid to do so, we must be attuned to oblique statements or to the unspoken desire.

Our trouble is that we are often so busy being scientists that we forget to be doctors. The art of medicine requires as much as anything else that we be good listeners, and in this particular situation it is all important.

J.B.T.



Child Abuse and Abortion

To the Editor:

The point made in your editorial about child abuse (69:803, Nov. 1976) is very important. It seems to me that a realistic definition of the infant is mosly indistinguishable from that of the fetus. This means that

when the Supreme Court made their arbitrary decision supporting abortion on demand, they inadvertently negated those laws pertaining to the protection of children. Your formal question demands an urgent enlightened answer which ignores no aspect lest the law become null and we return to Darwinian concepts of survival of the fittest.

Sincerely Yours,
William M. Hicks, M.D., F.A.A.P.
365 Market Street
Clinton, Tenn. 37716

Ultra-Sound in Obstetrics

To the Editor:

In the November 1976 issue of our Journal (Vol. 69, No. 11) on page 788, you ran an article on ectopic pregnancy and its diagnosis by ultrasound. I want to thank you for including ultrasound in our Journal and encourage you to continue. However, I must take issue with the statements made by Drs. Bell and Gregory.

The ultrasound picture shown would appear to show a gestational sac high in the uterus with an excellent prognosis for the pregnancy and the appearance of the shown gestational sac is not that of a non-viable pregnancy.

If the pregnancy was located in the cornu of the uterus, then the pregnancy would have continued to grow. I would have to think that the authors confused cornual pregnancy with interstitial pregnancy.

I would agree that in a true ectopic pregnancy the uterus does not contain a gestational sac, however, it may present some echoes representing decidual reaction—so the uterus is not truly empty. I would disagree with the statement of identifying a gestational sac within an adnexal mass two-thirds of the time—50% or less would be more accurate.

I would suggest that this case represents over reading a sonogram and over reacting in the treatment of the patient.

I would hope that a review of this article by an obstetrician knowledgeable in ultrasound would have prevented our membership from receiving the concept that ultrasound is the complete answer to our obstetrical problems and that treatment of a cornual pregnancy consists of 2 D & Cs and an exploratory laparotomy.

Since it was E. M. Clayton, Jr. and myself that were responsible for bringing ultrasound to Nashville and the southeast in 1968, it distresses me to see this type of information published.

James B. Millis, M.D.
2531 Park Drive
Donelson, Tenn. 37214

Dr. Bell Replies:

To accuse the authors of confusing a tubal pregnancy (i.e. interstitial pregnancy) with a pregnancy in the cornu of the uterus at the entrance of the tube is to miss the main point of the article. The abnormal localization of the gestational sac is apparent on the photograph. It was exactly this difficult problem which the authors wished to discuss, and which Dr. Millis prefers to ignore or oversimplify.

To say that the uterus is not truly empty in an ectopic pregnancy is of course correct. However, this terminology was used by Professor Donald in his recent talk at Vanderbilt and appears in Dr. Kobayashi's textbook. It means that the uterus does not contain a gestational sac.

To state that the article implies that ultrasound is the complete answer to obstetrical problems is to misinterpret this article. An unbiased reader could not possibly believe that the statement in the article, "The ultrasound examination is probably the most useful test under these conditions," implies that ultrasound is a panacea to all obstetrical problems.

POEM

To the Editor:

Several month ago you published a poem of mine in the JOURNAL and I appreciated it very much. Now that I am retired at age 69 as of October '76 I have written another on retirement. It is geriatric in nature and I am enclosing it in case you might want to consider it for publication.

John H. Dougherty, M.D.
Hardin Valley Road Rt. #3
Concord, Tennessee 37720

"Retirement"

Separation's not the maneuver nice
E'en tho great effort is made to entice
Those who must approach this stark precipice
And make the decision that will suffice
To render them content and wholly sane
And prevent the chance they'll be a bane;
To make sure they'll become no nuisance
But have avocation as recompense
To children avoiding embarrassment
And to partner raise and sustain a tent.

Some approach this great decision urbane,
Not showing their fear or dread in the main,
But hiding emotions that might inflame,
Approach Ms. Future; a capricious dame,
She beckons on and holds out olive branch,
Extolling Utopia pure perchance.
Some stagger on and some erect perhaps
And some in geriatric chair relapse.

The party's given, the young ones admire,
P'haps envision time to which they aspire,
They place a kiss on weathered shaven cheek
And wish him well before he turns to seek
Which fork to take into eternity.
Within there's little of serenity.
The publications state how good he's been
E're accomplishments great, well done back then
When graceful, full of his faculties
Resolved, undid, all great complexities.
Now he only looks in bewilderment
And grasps the last straw as tho heaven sent.
Perhaps at home he'll be labeled noddy
And urged to take the second mild toddy.

Let's look at this thing with gray acumen.
 Forced retirement's not exactly human.
 Some can try and find placid change of pace
 To ease down from life's fev'rish, fearful race.
 Some can find relief and serenity
 In church pew with hallowed propinquity.

A.R.P., concert, books, will favor some;
 Other's in garden, fields, hood for bee gum
 Will find happiness and accomplishment.
 It only depends on what'll be their bent.
 Perhaps the one who psychiatrically
 Wanders most in life's gilt theatric'ly
 Sputters most on the spit of days blazes
 Arranged corridors and torrid mazes.
 He's ever acting like peers and others
 Yet being himself if he had his druthers,
 E're providence, Oedipus, influence
 Mold him, form, inexorable offense
 Often driven, striven, ceaseless never
 Searching for the answer, o're step Minerva.
 To reach her, with his arms out, extended
 The elusive fawn, just ahead, blended
 With the shadows and secrets ever hid
 In the mist under Pandora's carved lid
 Too fearful to raise it and peer within
 And explore to the depths of mortal sin.
 Mad bats and humors erratically fly
 And consume only those ready to die.

If only serenity stay not far,
 And the Scurrilous Displacer not mar
 The function of one's glandular system
 Disturbed, changed one's functions till you missed them,
 All things that we cheerf'ly take for granted:
 Urine, feces, blood, bile, now decanted.

One that can remain happiest of all
 Is to accept nature's extended pall
 And not fret much o'er flaccid phallus
 But accept serenely without malice
 The memory of erections in palace,
 Or those in hut, or behind opaque jalous.

'Tis true, we all turn, decry, growing old
 And dislike being cast out of the mold.
 The end shall come, preset, we know not when
 'Tis only if accompanied by a friend
 Or gentle, compassionate, lovely mate
 Who'll hold our hand and sooth us on that date
 After treading long years, approach the bar
 That we together have viewed from afar,
 In philosophic glee called sinister,
 By others Fate, who would administer
 The last rites to those who have gone before
 But lit'le at all know us of distant lore.
 It's been visualized by many a man
 Extolled in verse, pew, and sweet plucking strand.

The Scotsman says: "I'm wearing away Jean
 To the land o're the lea," I've never been
 Yet retire is something in that order
 The looney, the schiz without due smolder.

Take it or leave it, but all of the rest
 Are herded along to entrapments nest
 And settle in the gilded Terminus
 Where life ends with everything permanence.

John Dougherty, Sr. M.D.
 Rt. 3, Hardin Valley Rd.
 Concord, Tenn. 37720



MCCAUGHAN, JOHN JOSEPH, age 82. Died January 1, 1977. Graduate of the University of Tennessee School of Medicine. Member of Memphis-Shelby County Medical Society.



The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Parma Charlton Davis, Jr., M.D., Chattanooga

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY

Edward M. Burton, M.D., Johnson City

Butler Fuller, M.D., Johnson City

Thomas B. McGinnis, M.D., Johnson City



Knoxville Academy of Medicine

The Knoxville Academy of Medicine met on January 11 at KAM Headquarters. The E Club met at 6:00 p.m. with Dr. Anthony Buhl, Assistant Director, Clinch River Breeder Reactor Project, who spoke on "A Breeder in Your Future."

A panel composed of: David F. Fardon, M.D.; Donald J. Russell, M.D.; Jonathan Burnette, Attorney-at-Law; Arthur Byrne, Attorney-at-Law; and Mr. Jim Richardson, Claims Manager of SVMIC presented a "Malpractice Counter-Education Program." Dr. C. Gordon Peerman, Jr., President of TMA was special guest and addressed the membership.

Continuing Medical Education Opportunities included: Pathology—Area Pathologists met in the Pathology Conference Room at UT Hospital on January 19th to discuss interesting cases.

Knoxville Internal Medicine Society—Dr. J. Serge LeBel spoke on January 17th at the Academy Building on "Peptic Ulcer Update."

Nashville Academy of Medicine

The 156th Annual Meeting of the Academy was held at the University Club on January 11. The program agenda included a memorial observance for deceased members, an awards ceremony, presentation of 1977 Academy officers and Board members, remarks by the outgoing President, Dr. Dan Sanders, and incoming President, Dr. James Hays.

Meeting sites for the four regular 1977 meetings of the Academy will be rotated between Memorial, Hubbard, Baptist, and St. Thomas Hospitals in order to make the meetings more accessible to a greater segment of the membership.

national news

THIS MONTH IN WASHINGTON (From the AMA's Office in Washington, D.C.)

Califano Becomes Secretary of HEW

Washington lawyer, Joseph Califano, Jr., one of Lyndon Johnson's top "Great Society" architects, has been named Secretary of the Health, Education and Welfare Department.

The 45-year-old native of Brooklyn is regarded as one of the Capitol's brightest men. He knows the workings of government inside out. He knows most of the Congressmen of importance to HEW. And he knows most of the programs—many of them established during the "Great Society" days—that he will now administer.

The appointment of Califano to the politically sensitive position was the final cabinet selection by Carter, and was one of the best received. Liberals, including Ralph Nader, saw in Califano's "Great Society" background a promise of a bigger and better "Great Society"; conservatives found reassurance in Califano's reputation as a steady political veteran who is interested in cutting down on waste and inefficiency.

Most of Califano's efforts on behalf of Johnson as the President's chief domestic adviser in the mid-1960's was in the welfare and education areas rather than health where he doesn't have much of a track record.

He knows what he is up against at HEW. In a speech last summer, Califano said a new President will have a tough time coping with the entrenched bureaucracy. "The departments and agencies of the federal executive are a minefield of bureaucratic interests jealous of their juris-

dictional turf," he said. The programs and their constituencies outside government "will be poised to oppose any change in the status quo."

Califano carved a reputation as an exceptionally able lawyer during the out-in-the-cold eight years of Republican administration. It isn't unusual for top officials of outgoing administrations to land plush jobs with Washington law firms, but Califano demonstrated that he was far more than a contact man. He was with the famous Arnold and Porter firm here, then he teamed with the equally prestigious William (Edward Bennett) and Connolly firm where he served as counsel to the Democratic Party for two and a half years. After Harvard Law School he joined a New York law firm which once was headed by Thomas E. Dewey.

Califano was first attracted to Washington with the election of John Kennedy. He joined the Defense Department where he quickly became one of Defense Secretary Robert McNamara's "Whiz Kids." Lyndon Johnson asked him to come to the White House to serve as his domestic aide. There he was known as a driving, tough negotiator between labor and management over wage-price guidelines. He was interested in a systems-analysis approach to budgeting federal agencies which should mesh with Carter's enthusiasm for "zero-based" budgeting.

If Carter carries out his promise to give his department heads plenty of rein in policy matters, Califano might emerge as the chief policy architect in health affairs. Certainly Carter will rely heavily on him for advice. After years as a behind-the-scenes power, Califano will now be in the limelight.

The Private Sector and Cost Control

A concerted and united effort by industry and labor to control medical costs is needed to avert a federal takeover of health which would "result in national expenditures of truly astronomical proportions," contends the President's Council on Wage and Price Stability.

Asserting that the day is coming fast when the people discover "how much they must increasingly sacrifice simply in order to maintain the status quo in health care services," the Council said the public's response would be to turn to the government for a solution.

"Absent any major changes in the structure of the medical care system between now and then, the federal government will step in, and

when that happens, we are going to be faced with a permanent problem which will defy solution," said William Lilley, acting Council Director, and his deputy James Hedlund.

In a lengthy report on rising health care costs, the Council said "cost control incentives proposed by the private sector—that is, by industry and labor—promise to be more effective than those imposed by the multitude of government agencies which have attempted to tackle the problem . . . the private sector is motivated by an economic incentive which the government will simply never share."

The report said the government, in its Medicare and Medicaid programs has a poor record of controlling costs. "The blizzard of rules and regulations which would accompany full federal financing and administration of the health industry would add to costs and reduce the limited incentives that now exist for efficiency and cost containment," the Council said.

The report pointed to company programs which encourage a second opinion before elective surgery. Some corporations have set up in-house medical facilities because they have learned that this is a less expensive way of providing their employees with health care, says the Council. "Health maintenance units with salaried physicians have reduced costs, according to the report. "In other localities, corporations and unions have become involved on hospital boards and areawide planning bodies to eliminate duplication of facilities and introduce other cost-saving efficiencies."

The Council said "the private sector must step up its efforts many fold—it must apply the full measure of ingenuity and management skills which are so characteristic of the American system. In short, the private sector must start doing more, a lot more."

The report mentioned "strong opposition from a highly respected, well-organized medical establishment. Private efforts at cost-control are difficult to undertake in the face of this opposition, and difficult to achieve, but we remain convinced that the goal of quality health care, at reasonable costs, is attainable within the context of a largely privately disciplined system. Indeed, we feel it is only within the context of the private system that it is attainable."

Medicaid Fraud and Abuse

The American Medical Association and state

and local medical associations "have played a central role" in helping the Senate spotlight Medicaid fraud and abuse. The credit was given by Sen. Frank Moss (D-Utah), Chairman of the Senate Aging Subcommittee that conducted the well-publicized investigations of "Medicaid Mills" earlier this year.

The Senator also said "the number of physicians who cheat" is very small.

In a letter to Richard E. Palmer, M.D., President of the AMA, Moss said "The Illinois Medical Society, the Chicago Medical Society and the Illinois Physicians' Union were directly responsible for my subcommittee's exposure to the problem of Medicaid 'Mills.'"

The abuses highlighted in the subcommittee's report "exist for many reasons but AMA inaction isn't one of them," said Moss.

The Senator said the subcommittee's criticism "was not directed at contemporary medical practice."

"It was directed at a growing aberration in our urban ghettos called the Medicaid 'Mill.' The culprits we identified are greedy businessmen and real estate speculators, the same people we found pyramiding nursing home mortgages in New York. Now they have found a new gravy train. They hire foreign-trained physicians (we include podiatrists and chiropractors in the definition) and pressure them to see more and more patients in less and less time. The entrepreneurs keep from 50 to 70 percent of the money Medicaid pays to the foreign practitioner. . ."

Poor quality care results, Moss said. "It could hardly be otherwise given the low Medicaid rates, the great delays in payments, the often and arbitrary denials of payments as well as the all-encompassing pressure exerted on mill practitioners to grind patients through the mill. Little wonder reputable physicians avoid Medicaid practice. Even the best intentioned physician would have difficulty functioning in this kind of environment."

In Medicaid, the "ripoffs" are taken by the clinic owners who more often than not are not physicians, said Moss.

The number of providers who abuse the Medicaid system may be four percent of total Medicaid participating physicians (including chiropractors and podiatrists) or less than two percent of all physicians in the United States, he said. This is hardly a blanket indictment.

Moss endorsed a statement by Dr. Palmer

that other providers have a far worse track record as far as cheating the system. "I would include, for example, nursing homes, pharmacies that specialize in welfare clientel and clinical laboratories that do a high volume of Medicaid business."

The lawmaker wrote that "only with the assistance of the Medical profession can we seek to end the fraud and abuse which now haunts our government health care programs. We can bring providers who bill for services not rendered to the bar of justice but a more complicated scheme inevitably involves questions of medical judgment which only physicians are capable of rendering."

Prescription Drug Study Funded by PMA

A commission to study prescription drug usage and adverse reactions has been formed with the blessings of Senator Edward Kennedy (D-Mass.) and the funding of the Pharmaceutical Manufacturers Association (PMA).

PMA answered a challenge by Kennedy that the drug makers confront the problem by agreeing to fund an independent study commission for three years at \$250,000 annually.

"The problem of adverse drug reactions is definitely a problem," stressed PMA's Chairman Robert R. Clark.

Both Clark and Kennedy hope the commission will be able to design a system for post-marketing surveillance of drugs by the Food and Drug Administration so that both adverse reactions as well as new drug indications become more quickly known. Such a system, termed "Phase IV" by Kennedy, could shorten the wait for pre-market approval of new drugs.

The 18 members of the Joint Commission on Prescription Drug Use were nominated by pharmaceutical and medical groups including the AMA.

Report on Drug Abuse

Drug abuse remains a "chronic, persistent problem" in the United States with no simple solutions in sight in the opinion of a joint annual report by federal agencies involved with drugs. The report proposed no basic shift in federal policy toward drug abuse, but suggested the possibility of lifting or easing criminal penalties for smoking marijuana.

The Strategy Council on Drug Abuse declared the government "ought to strongly discourage the

use" of marijuana. "The question, however, is how do we most effectively accomplish this with the least cost to society."

President-elect Jimmy Carter said during his campaign he favored decriminalization of possession of small amounts of the product, but he supported continued crackdowns on sale and distribution.

According to the report, marijuana carries a "relatively low social cost." Some 22 million Americans smoked marijuana last year, a "saturation" total that should prod the federal government into a decision on whether to continue to approach its use on a criminal basis.

The Council is composed of the Drug Enforcement Administration (DEA), the National Institute on Drug Abuse, the State Department and the White House.

Confidentiality of Medical Records

Congress is showing increased interest in the problems of maintaining confidentiality of medical records in the age of computers and vast federal medical programs. The House Commerce Subcommittee on Oversight and Investigations is considering hearings on the issue next year.

The most serious evidence of abuse so far came with state grand jury indictments in Denver, Colo., of an investigative company—Factual Service Bureau, Inc.—on charges of selling confidential records to large insurance firms. Factual was alleged to have had agents who were able to penetrate the records of the Federal Bureau of Investigation and the Internal Revenue Service, among others. Twenty defendants, including three insurance companies, have been indicted so far in the investigation launched by Colorado District Attorney Dale Tooley, who claims the evidence so far "is really the tip of a nationwide iceberg." Federal agencies are also pursuing the case.

The House Oversight Subcommittee, headed by Rep. John Moss (D.-Calif.), is carrying on a running dispute with the Social Security Administration over the privacy of medical records in the Medicare program. "We believe very serious questions remain about privacy of records concerning individuals in custody of the Social Security Administration, especially in light of the future plans," said Moss in a letter to Social Security Chief James Cardwell.

Social Security operates three data transmission systems which link private Medicare intermedi-

aries with the Social Security Health Insurance Data Bank. The two less sophisticated computer systems, the Advanced Record System (ARS) used by private Medicare intermediaries in 16 locations, and the Programmable Magnetic Tape Terminals (PMTT) used by Blue Cross, Blue Shield, and all but two other private intermediaries, use record retrieval systems "which cannot be abused by any employee of a private contractor either in an authorized or unauthorized manner," said Moss.

Medicare Review Regs Established

The HEW Department has published final regulations under which Medicare providers may obtain judicial review of any final decision of the Provider Reimbursement Review Board, or of any reversal, affirmance, or modification by the Secretary.

The five-member Provider Reimbursement Review Board under Medicare hears Medicare appeals by institutional health care providers who disagree with the cost determinations made by health insurance organizations acting as fiscal intermediaries in Medicare hospital insurance.

Under the regulations, a Medicare provider may file for judicial review by a Federal Court after the final decision of the Provider Reimbursement Board, or the HEW Secretary, but must do so within 60 days of the final decision.

HEW can review any decision of the Board but must do so within 60 days after the provider has been notified of the Board's decision.

Medical Screening Program Attacked

The Medical Screening Program for children of poor parents has come under new attack. The Southern Regional Council, a private research group, said a study of 23 southern communities revealed "evidence of bureaucratic and political resistance to meeting the health needs of the program's relatively small target population—those under 21 years of age who are eligible for Medicaid."

Rep. John Moss (D.-Calif.), Chairman of the House Commerce Subcommittee on Oversight and Investigations, has been a severe critic of HEW's operation of the early and periodic screening, diagnosis and treatment program. The Regional Council's report supported the Moss Subcommittee's earlier findings of lack of progress in the program.

The criticism is expected to be used to ad-

vance the cause of proposals in Congress to federalize Medicaid and to install new federal benefits for children and mothers.

AMA NHI Plan Backed by AAO

The American Association of Ophthalmology (AAO) has endorsed the national health insurance plan backed by the AMA in a position paper distributed to all members of Congress.

The Association said Ophthalmologists support the concept of legislation proposed by the AMA which "federalizes Medicaid, makes available variable tax allowances toward the purchase of health insurance depending on the taxpayers' taxable income, and offers catastrophic insurance to all."

The AAO said its membership "is aware that improvements are needed in care and financing of care in underserved areas which include the inner city, some remote rural areas, and for certain under-privileged population groups. Also that provision for expensive catastrophic illness is necessary. It is also aware that fiscal limits are dictated lest this nation err as have other countries that have overburdened their taxpayers with excessive program costs."

Dirks Joins AMA Washington Office

Harley M. Dirks, former chief staff member of the Senate Appropriations Subcommittee on Labor and Health, Education and Welfare, has joined the AMA's Washington Office as an assistant director in the Congressional Relations Department.

The 48-year-old Dirks, a native of the state of Washington, is one of the best-known figures in the Nation's Capital in the health field. As chief staff man on the Senate Subcommittee, he developed a thorough knowledge of the workings of health both in the executive and legislative fields. A book on Congress entitled "The Dance of Legislation," published several years ago, referred to Dirks as "an almost legendary figure on Capitol Hill" due to his influence and expertise in the health funding arena.

personal news

DR. R. BENTON ADKINS, JR. of Nashville has become a fellow of the American College of Chest Physicians. Other TMA members who have recently become fellows of the ACCP are: DR. K. MARLIN MATHIE-

SEN, JR. of Greeneville and DR. PETE S. SOTERES of Chattanooga.

DR. JOHN APPLING of Cleveland recently received the Sertoma Club's Service to Mankind Award.

DR. W. A. CROSBY of Dickson has been installed as President of the Dickson County Medical Society. Other elected officers are: DR. B. J. SMITH, President-Elect; DR. STAN ANDERSON, Vice President; and DR. DAN DRINNEN, Secretary-Treasurer, all of Dickson.

DR. THOMAS DORRITY of Memphis has been installed as President of the Memphis-Shelby County Medical Society. DR. JACK PIGOTT of Memphis was elected President-Elect.

DR. JAMES W. HAYS of Nashville has been installed as President of the Nashville Academy of Medicine. DR. JOHN L. SAWYERS, also of Nashville, was elected President-Elect.

DR. R. C. JONES of Kingsport has been installed as President of the Indian Path Hospital Medical Staff. Other officers elected include: DR. DENNIS CHIPMAN, Vice President and DR. A. J. MOSRIE, Secretary-Treasurer, both of Kingsport.

DR. JERRY L. KENNEDY of Tullahoma has been re-elected to his third one-year term as the Chief of Staff of Harton Hospital.

DR. JOHN H. MOORE of Kingsport has been installed as President of the Holston Valley Community Hospital Medical Staff.

DR. SAM PIEPER of Oak Ridge has been named interim superintendent of Central State Psychiatric Hospital in Nashville.

DR. H. WILLIAM SCOTT of Nashville has been installed as President of the Southern Surgical Association.

DR. JAMES W. SHERRELL of Chattanooga has been certified a Diplomate of the American Board of Obstetrics and Gynecology.

DR. J. BRYAN SMALLEY of Maryville has been installed as President of the Blount County Medical Society. Other elected officers are: DR. HENRY A. CALLAWAY, JR., Vice President and DR. OLIVER K. AGEE, Secretary; both of Maryville.

DR. CLARKE M. WOODFIN of Tullahoma has been installed as President of the Coffee County Medical Society. Other elected officers include: DR. CLARENCE FARRAR of Manchester, President-Elect; DR. BRUCE E. GALBRAITH of Tullahoma, Vice President; and DR. HO KYUM KIM of Tullahoma, Secretary-Treasurer.

DR. JA-NAN YU of Manchester was elected Chief of the Medical Staff at Coffee County Hospital.

announcements

NATIONAL 1977

Feb. 28-	American College of Cardiology, Philadelphia Civic Center, Philadelphia
Mar. 3	
Mar. 10-11	American Society of Regional Anesthesia, Diplomat, Hollywood, Florida
Mar. 24-27	American Society of Internal Medicine, Alameda Plaza, Kansas City, Missouri
Mar. 25-27	American Psychosomatic Society, Fairmont Colony Square, Atlanta
Mar. 26-31	American Academy of Allergy, Americana Hotel, New York
Mar. 28-31	American College of Surgeons, Los Angeles Hilton, Los Angeles
Apr. 3-7	Southeastern Surgical Congress, Americana, Bal Harbour, Florida
Apr. 13-14	American Geriatrics Society, San Francisco
Apr. 17-21	American Academy of Pediatrics, New Orleans Marriott, New Orleans
Apr. 17-22	American College of Radiology, Shamrock Hilton, Houston
Apr. 17-24	North American Clinical Dermatologic Society, Hyatt House, Monterey, California
Apr. 18-21	American College of Physicians, Dallas
Apr. 19-23	Christian Medical Society, Wichita Hilton Inn, Wichita
Apr. 23-28	American Pediatric Society, Chalfonte-Haddon, Atlanta
Apr. 25-30	American Academy of Neurology, Atlanta Hilton, Atlanta
Apr. 29-	American Trauma Society
May 1	
May 8-11	American Association of Plastic Surgeons, Drake Hotel, Chicago
May 9-12	American College of Obstetricians and Gynecologists, Chicago
May 10-12	American Laryngological, Rhinological and Otological Society; Sheraton Boston, Boston
May 15-18	American Thoracic Society, Hilton Hotel, San Francisco
May 16-17	American Society for Clinical Oncology, Denver Hilton, Denver
May 18-21	American Association for Cancer Research, Denver Hilton, Denver
May 25-28	American College of Sports Medicine, Marriott, Chicago
May 29-	American Association on Mental Deficiency, Fairmont, New Orleans
June 3	
May 30-	American Ophthalmological Society, The Homestead, Hot Springs, Virginia
June 1	
May 31-	Society of Neurological Surgeons, Rochester, Minnesota
June 2	

STATE

Apr. 13-16	Tennessee Medical Association, Hyatt-Regency, Nashville
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continuing education opportunities

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Avenue, Nashville, Tennessee 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman can plan an individualized program of one-to-four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Anesthesiology	Bradley E. Smith, M.D.
Medicine	Grant W. Liddle, M.D.
Allergy & Immunology	Samuel Marney, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Endocrinology	David Rabin, M.D.; David N. Orth, M.D.
Diabetes	Oscar B. Crofford, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Oncology	Robert Oldham, M.D.

Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Orthopaedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Surgery	

General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
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Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.
Cancer Chemotherapy	Vernon H. Reynolds, M.D.

ELIGIBILITY: All licensed physicians are eligible.

ADMINISTRATIVE FEE: \$200.00 per week.

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APPLICATION: For further information and application, contact:

Paul E. Slaton, M.D., Director, Continuing Education
305 Medical Arts Building
Nashville, Tenn. 37212 Tel. 615/322-2716

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Continuing Medical Education Schedule 1977

	Update in Anesthesiology 1977, postponed until later in spring when speaker is available, Bradley Smith, M.D.
March 18	Tumor-Associated Products, Robert Oldham, M.D.
Mar. 30-31, Apr. 1	Hypertension: Update 1977, American College of Physicians, Grant W. Liddle, M.D.; Paul E. Slaton, M.D.
April 1	Annual Barney Brooks Lecture in Surgery Professor George Smith University of Aberdeen, Scotland Medical Amphitheater (C-2209) 4:00p.m.
April	Prostatic Diseases in General Medicine, Robert Rhamy, M.D.
Apr. 22-23	Gynecologic Oncology and the Eighth Annual Whitacre Lecture, Conrad Julian, M.D.
Apr. 28	Annual Frank H. Luton Lecture in Psychiatry, Marc Hollender, M.D.

- April 29 What's New in Obstetrics for Nurses?, Mary Freese, R.N.; Frank Boehm, M.D.
- May 19-20 Postgraduate Course in Allergy, Vanderbilt University; University of Tennessee, Memphis; University of Mississippi, Philip Lieberman, M.D.; Samuel Marney, M.D.
- May 14 International Medicine, Vanderbilt University Medical Alumni Reunion
- May 25-26 Sixteenth Annual Seminar in Psychiatry, Frank Luton, M.D.
- June 20, 21, 22 National Symposium on Impedance Screening in Children, Bill Wilkerson Hearing & Speech Center, Fred Bass, Ph.D.; Charles Bluestone, M.D.; Jerome Klein, M.D.; Earl Harford, Ph.D.
- Aug.-Sept. Internal Medicine Intensive Review (11 sessions), Paul E. Slaton, M.D.
- September Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.
- September Annual Wm. F. Orr Lectureship in Psychiatry, Marc Hollender, M.D.
- Oct. 17-22 Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.
- December What's New in Obstetrics for Physicians?, Frank H. Boehm, M.D.

For information contact:

Vanderbilt Continuing Education
305 Medical Arts Building
Nashville, Tennessee 37212
Tel. 615/322-2716

THE UNIVERSITY OF TENNESSEE COLLEGE OF MEDICINE Continuing Education Courses 1977

- Feb. 25-26 Current Concepts of Cancer Management, Memphis
- Feb. 27-
Mar. 2 Otolaryngologic Allergy, Memphis
- Mar. 6-9 Basic Principles of Rhinoplasty, Memphis
- Mar. 16-18 Gynecologic Endocrinology, Memphis
- Mar. 21-26 General Review Course for Family Physicians, Memphis
- April 4-6 Colposcopy, Memphis
- April 21-22 Controversies in General Surgery, Memphis
- April 25 Diagnosis and Management of Common Skin Diseases
- April 28-29 Leigh Buring Conference, Memphis
- May 19-20 Allergic Diseases for Generalists
- May 23-27 Intensive Review of Anesthesiology, Memphis
- May 25-28 Basic Clinical Electrocardiography, Paris Landing Inn (Pickwick Lake)

Address all communications to:

Division of Continuing Education and Conferences
UTCHS
800 Madison Avenue
Memphis, TN 38163

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER Chattanooga

- March 3-4 Arthritis and Office Orthopaedics
Pine Isle Resort
Buford, GA
- March 7-11 Diagnostic Radiology for the Primary Care Physician
Tamarron Ski Lodge
Durango, CO
- March 30 Urology Circuit Course
Athens, TN
- March 31 Urology Circuit Course
Chattanooga, TN
- April 1 Urology Circuit Course
Dayton, TN
- April 22-23 Pediatric ENT
Chattanooga Choo-Choo
- May 16-20 General Radiology
Sahara Hotel
Las Vegas, NV

Medicine Update '77

- Athens, Tenn. 12:00 noon to 2:00 p.m.
- Chattanooga,
Tenn. 4:00 to 6:00 p.m.
- Feb. 24 Gastroenterology
- March 10 Rheumatology
- March 24 Neurology
- April 7 Endocrinology
- April 28 Oncology
- May 12 Infectious Disease

ACP 1977 REGIONAL MEETINGS, POSTGRADUATE COURSES

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three-to-five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category I requirements for the AMA Physician's Recognition Award.

**See August 1976 and January 1977 issues
for complete listing.**

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners

in

Office Management of Emotional Problems

One, Two and Three Week Courses. Minimum of 40 hours per week.

Tuition Fee: \$350.00 per week for the 1st & 2nd week of training; \$500.00 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

WANGENSTEEN SURGICAL SYMPOSIUM June 9-11, 1977

University of Kentucky Medical Center
Lexington, Kentucky

Registration fee: \$200.00

For further information about the above, contact:

Frank R. Lemon, M.D.
Continuing Education
College of Medicine
University of Kentucky
Lexington, Kentucky 40506

AMERICAN COLLEGE OF CHEST PHYSICIANS 1977 POSTGRADUATE CALENDAR

Continuing Education Programs

See September, 1976 issue for listing.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

PROGRAM SCHEDULE

- | | |
|--------------------|---|
| Feb. 21-
Mar. 6 | "ANAEROBIC INFECTIONS, PART I," with Robert Fehety, M.D., Head Division of Infectious Diseases, Department of Medicine, University of Michigan, Ann Arbor. |
| | "ANAEROBIC INFECTIONS, PART II," with William J. Ledger, M.D., Professor of Obstetrics and Gynecology, University of Southern California, and Director of Maternal Fetal Medicine at Women's Hospital, Los Angeles. |
| | "CARCINOMA OF THE PROSTATE," with Earl Wendal, M.D., urologist, Passavant Hospital, Chicago. |
| Mar. 7-
Mar. 20 | "GENETICS FOR THE GENERALIST" |
| | • Autosomal Dominant & Recessive Disorders |
| | • Chromosomal & X-Linked Disorders |

- Multifactorial Disorders with Pomeroy Sinnock, M.D., geneticist, and Director, Thomas Roderick, M.D., geneticist, Ms. Clareann Bunker, genetic associate, William Bromley, M.D., ophthalmologist, and Morris Lambdin, pediatrician; Genetic Counseling Center, Ellsworth, Maine.

Mar. 21-
Apr. 3

"TERMINAL CANCER: THE HOSPICE FORMULA FOR PAIN CONTROL"

and

"TERMINAL CANCER: THE FAMILY'S VIEW," with Sylvia A. Lack, M.B., Medical Director of Hospice, New Haven. "THE RATIONAL USE OF ANTIBIOTICS IN SURGICAL PATIENTS," with Richard H. Parker, M.D., Chief, Section of Infectious Diseases, Veterans Administration Hospital, Washington, D.C.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

1977 Practice Management and Economic Seminar Schedule

- | | |
|-------------------|---------------------------|
| Apr. 30-
May 7 | Queen Elizabeth II Cruise |
| June 18-25 | Madrid, Spain |
| Aug. 20-27 | Rome, Italy |
| Oct. 2-9 | Key Biscayne, Florida |

INDIANA CHAPTER

American College of Emergency Physicians Emergency Medicine Seminar

May 11-14, 1977

CME Credits Applied For: 20 Hours

Co-sponsor: Indiana University School of Medicine

Fees: \$50.00-\$100.00

Contact: Davis Gettle, M.D.

10005 Hillsdale

Carmel, Indiana 46032

317/844-7105

45th ANNUAL ASSEMBLY SOUTHEASTERN SURGICAL CONGRESS

April 3-7, 1977

Americana Hotel, Miami Beach

A postgraduate course on "Pre- and Post-Operative Care of the Surgical Patient" is scheduled for Sunday, April 3, and Tuesday afternoon, April 5.

Dr. Benjamin F. Byrd, Clinical Professor of Surgery, Vanderbilt University School of Medicine and Chairman, Department of Surgery, St. Thomas Hospital and a former President of the Congress, will receive the organization's Distinguished Service Award and make an address.

Another special feature will be scientific exhibits produced by individual surgeons or medical schools to visually demonstrate new techniques and studies.

Both the scientific sessions and postgraduate course

are accredited by the American Medical Association for Category I credit.

**Harvard Medical School
Department of Continuing Education
COLPOSCOPY
IN GYNECOLOGIC PRACTICE
April 28-30, 1977
at the
Hyatt Regency, Cambridge
and
Beth Israel Hospital**

This course is designed to cover the practical aspects of colposcopy. Major emphasis is placed on the role of colposcopy in the management of cervical and vaginal neoplasia. The course is designed to teach basic colposcopy, theoretical and practical with histopathologic correlation. Lectures, group tutorials, videotapes and group live sessions will be utilized for teaching.

This course has Category I accreditation for approximately 16 hours toward the AMA Physicians' Recognition Award, as well as being accredited for 25 cognates by the American College of Obstetricians and Gynecologists.

**PATHOLOGY OF THE ENDOCRINE GLANDS
April 4-9, 1977**

UNDER THE DIRECTION OF

*Austin L. Vickery, Jr., M.D., Professor of Pathology
at the Massachusetts General Hospital,
Harvard Medical School*

Current knowledge of the pathology of the endocrine glands will be presented in lecture form with emphasis on gross and microscopic morphology and a correlation with clinical manifestations. Disorders of endocrine significance, as well as other diseases, including non-functioning neoplasms of the endocrine glands, will be covered. Laboratory sessions will consist of supervised study of individual sets of microscopical slides illustrative of the lecture material. The course is designed primarily for pathologists and for clinicians interested in the pathologic background of hormonal disorders. A syllabus and selected references are distributed to provide a permanent record of the course.

Pituitary Drs. Calvin Ezrin, Kalman Kovacs
and Eva Horvath
Thyroid Dr. Austin L. Vickery, Jr.
Parathyroid Dr. Sanford I. Roth
Adrenal Drs. Richard B. Cohen and
Ronald A. DeLellis
Ovary and Testis Drs. Robert E. Scully and
Stanley J. Robboy

Cytogenetics of Sex—

Chromosome Anomalies Dr. Leonard Atkins
Pancreas Dr. Merle A. Legg
Placenta Dr. Shirley G. Driscoll
Medullary Carcinoma of Thyroid Carcinoid and

Para-Endocrine Phenomena ... Dr. E. D. Williams

For information, write: Associate Dean, Department of Continuing Education, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts 02115.

**ASPEN SEMINARS
1977 Schedule**

Aspen Systems Corporation has announced a 1977 seminar schedule which features six seminars devoted to major problems of health care managers and professionals and includes a new seminar—*Maximizing Cost Reimbursement*.

The new seminar is an advanced how-to guide for the experienced professional who seeks new and better ways to maximize reimbursement while adhering to legal regulations.

Dates and locations are as follows:

Maximizing Cost Reimbursement—Miami, Feb. 7-9; San Francisco, June 27-29; Montreal, August 3-5; New Orleans, Nov. 7-9.

Developing Hospital Rate Structures—New York, March 9-11; Gatlinburg, Tenn., Aug. 17-19; San Francisco, Dec. 8-10.

Planning for the Hospital Executive—Vail, Colorado, Feb. 3-5; Williamsburg, Va., July 20-22; Chicago, Oct. 31-Nov. 2.

Emergency Medical Services—Legal Aspects—New Orleans, Feb. 28-Mar. 2; Hyannis, Mass., Aug. 8-10; Las Vegas, Dec. 5-7.

Medical Staff Law and Bylaws—Palm Beach, March 28-30; Hilton Head Island, S. C., July 13-15; San Francisco, Sept. 28-30; Woodlands, Texas, Dec. 12-14.

Reimbursement Controversies and Appeals—Estes Park, Colorado, July 27-29; Miami Beach, Dec. 1-3.

In *Maximizing Cost Reimbursement*, the new seminar, instructors explore methods for handling the complex problems that can arise at any stage of the reimbursement process.

Developing Hospital Rate Structures provides comprehensive information on successful methods of developing hospital rate structures, and new and useful ideas on cutting costs.

Planning for the Hospital Executive is an intensive seminar on strategic planning which provides the experienced hospital executive with up-to-date techniques and skills necessary to function effectively in the new planning environment.

Emergency Medical Services—Legal Aspects provides administrators, physicians, nurses, and technicians with an understanding of the rapidly changing regulations, statutes, and standards now affecting emergency medicine.

Medical Staff Law and Bylaws provides health institution management with the vital tools needed to establish procedures and working relationships with medical staffs.

Reimbursement Controversies and Appeals gives participants an in-depth view of the administrative processes involved in the settlement of controversies concerning reimbursement under the Medicare program.

Further information on the Aspen Seminars may be obtained by writing Registrar, Aspen Systems Corporation, 20010 Century Blvd., Germantown, Md. 20767.

CURES FOR ALL ILLS

Old Medical Books Reveal Unusual Treatments

Dr. Thomas Fuller was a physician who lived and worked in Canterbury, England in the late 15th and early 16th century. In the late 1500's he wrote a book entitled "A Body of Medicines." It was printed in 1702 by a William Innys at the Prince's Arms in St. Pauls Church-yard in London. I was fortunate in finding an excellent copy of this book in a delightful book stall in London several years ago. The price of 12 pounds was, I think a real bargain.

Not all antique books appear antique—some merely look old and dirty and worn. This copy of mine is mellow. The leather binding is cracked and parched but retains a lovely patina of rare old things. It even has the faint suggestion of a mellow odor.

Dr. Fuller writes a rambling preface in which he states that the purpose of his book is to help young physicians by offering some of the wisdom and knowledge he accumulated during many years of private practice. His book of 512 pages is composed almost entirely of prescriptions which cover most of the disease states known at that time. The good doctor does not claim credit for all the information included. He freely acknowledges help from many sources including the temple writings of Aesculapius, Largus of Rome and Myropsus the Greek. He has also borrowed from Arabian, Dutch, German and early English physicians.

He goes on to say: "and I am willing to flatter myself that I have not wholly failed of success in my practice . . . many of these cures I have used with success and I have tasted every one of the remedies in my book . . . and now having brought it up to the round number of a thousand prescripts: I never intend to add any more . . . as here are treatments for all ills."

Dr. Fuller's book was apparently widely used. He refers to printings in Latin (several years before my copy was printed) and complains that there were unauthorized translations and printings in Holland and France. The Philadelphia

Academy of Medicine has a copy of his book and reports that it was in moderate use in America during that era. It is reasonable to assume that some early physicians in this area used the book and utilized the same or similiar treatments on their patients. It is a fact that almost all of the medical books available during this country's early days came from England or other European countries. Very little American medical literature was printed before 1750.

Follows here a short selection of the prescripts, including indications, contents and dosage. (*None we recommended for use today*)

A Bag for the Side

Take bayberries, seeds of cummin, fenngreek and camomile flowers, each 1 handful; bran, salt, each 2 handful; this may serve to put in 2 bags. Let these be made hot, and applied alternately to the side, when outwardly pained. But if there be blood spitting, we must beware of hot applications.

Broth for a Consumption

Take conserve of red roses 4 ounces; confrey root 2 ounces; shavings of hartshorn 1 ounce; sage of Jerusalem 2 handful; plantain half a handful; rains of the sun 2 ounces; dates 4; boil these together with a chicken, the crag end of a neck of mutton, and three ounces of manchet in a suffecient quantity of spring water; and then strain it, and when it is cold take off the fat.

Let the sick drink a porrenger full, two or three times a day.

The White Diet

Take milk 2 quarts; the breast of a capon boiled; sweet almonds blanched and well pounded, 2 ounces; beat and mash all in a marble mortar; strain and wring it out hard; to this add rice meal sifted 3 ounces; boil it and when it grow thick, add white sugar half a pound; (perhaps this may be something too much, the palate being the best judge of the quantity) red rose water 5 ounces; boil it with a moderate fire.

This is a restorative in a consumption; and also in gonorrhea and tabes dorsalis (syphilis).

An Astringent Electuary

Take conserve of red roses 2 ounces; diascordium half an ounce; powdered bole 2 drams; dragons blood 1 dram and a half; balanstinte half a dram; oil of nutmeg and cinnamon, each 2 drops; syrup of dry'd roses 1 ounce, mix.

It comforts the ventricle and intestines, recovers the tone of the bowel, bridles their disorderly peristaltic motion, concentrates acrimony, appeaseth gripes; In a word it's an absolute medicine, furnished at all points to repres a diarrhea. But here it is to be observed, that as long as appetite and digestion remain sound, a diarrhea never doth hurt. The dose is half an ounce.

A Pleuritic Erpression

Take green dandelion 4 handful; bruise and pour on it red poppy water 1 pint; then strain, and add salt prunel 1 dram; crabs eyes levigated 2 drams; syrup of red poppies 3 ounces; mix.

It gives a check to the raging orgasm of the spirits; qualifies the fervor of the rarified boiling blood; melts down gellied lymph and provokes urine. After needful bleeding (without which nothing will signify much) let 5 spoonful be given each other hour.

Before we scoff too much it should be remembered that our grandparents and earlier ancestors probably used remedies very similiar. Even now we find large areas of the world (parts of Africa, Orient and South America) where native herb healers and witch doctors are active. Even lay practitioners in our own back country use treatments of like kind. Today in some countries substances such as sharks teeth, rhinoceros horn, spider web and unusual botanicals are prized and widely used.

More from Dr. Fuller:

A Refrigrating Gargle

Take waters of frog spawn, plantain and elder-flowers, each 4 ounces; red rose water 2 ounces; whites of eggs (beat up in water) 4; white sugar 1 ounce; mix.

It's a most grateful thing in hot burning fevers, and very commodious in heat, drought, asperity, and erosion of the tongue and mouth.

A Foment for Pain of the Hemorrhoids

Take onions, linseed, each 4 ounces, herbs henbane; toad-flax, yarrow, mullein, each 2 handful; boil in water 3 quarts to 2 quarts; in the strain'd dissolve opium 2 drams; mix and use luke warm.

It relaxeth the cruel tension of the vessels, obtunds the acuteness of pain, melts down and dissolves those viscid and grumous feculencies that lay obstructions and excite tumors; and lastly, it repells the inundation of the blood.

A Stomachic Foment

Take rough red wine 1 pint: brandy, wine vinegar, each half a pint; dry'd wormwood, mint, each half and handful, bistory root half an ounce, pomgranite peel 2 drams; cloves, mace, nutmeg, cinnamon, each 1 dram; venice treacle half an ounce, macerate close in calneo 2 hours, and use the strain'd, as hot as can be suffered.

This is indeed a noble remedy, notably comforting, warming, strengthening and is used with good success, when the stomach being grown cold and flaccid and is troubled with flatus, pain, queasiness, vomiting, loss of appetite and ill digestion; it's good also in diarrhea, hypercatharis, dysentery etc.

A Balsamic Glyster

Take broth of sheeps inwards (or head) 10 ounces; yolks of eggs 2; lacatellus balsam 1 ounce; sheeps sewet 2 ounces; mix, and put it up just hot enough to keep the sewet melted.

By fomenting, anointing, and lining the intestines, it cherisheth, composeth, appeaseth, and healeth their fervors, corugations, tortors, erosions and ulcers; and is a most desirable remedy for a dysentery, after once bleeding and purging.

Dr. Fuller expanded on many of his prescripts, sometimes relating his own experiences and of-times reporting work of other doctors and even other countries so that one might assume he was well read and traveled and up to date on developments in medicine. An example of a brief discourse with a prescript is seen here:

"Take red coral finely levigated 2 drams; salt of wormwood 4 scruples; juice of lemons fresh drawn 4 ounces; string cinnamon water 2 ounces; mix in an open glass, and let stand uncorked, lest their fermentation break the bottle.

"It wonderfully, and almost miraculously (like a God in a machine, as they say) represseth subversions of the stomach and motions to vomit. I have many times observed, that in continual fevers, miserable afflicting with anquish at stomach, and symptomatic vomiting, more good hath been done with medicine alone, than with all that ever I could by anxious study and various trials find out."

The doctor used snails, with and without the shell, and blood from various animals in his cures. One mixture he liked consisted of 3 pounds of snails, orange rinds, calves blood, water cress and whey. This distilled in a cold still. In discussing the preparing he wrote:

As to cold still waters, it's most certain, they are apt to carry off the salt of the metal; for I have often observ'd them to taste as tho a good quantity of saccharau saturni were dissolv'd in them. And in the Book of Experiments, made in the Academy del Cemento, it is said, that if water distilled in a leaden still be poured into river or spring water, 'twill muddy it; which water distill'd in glass will not; and that muddy water will become clear again, if a few drops of strong vinegar be put into it, and shook about; the plain reason must be, because the acid precipitates the salt of the lead.

That water distilled from milk is not meer, sincere, elementary water manifestly appears (among other arguments) from hence; that if it be kept too long, it turns sour. Not flesh broth (which is water impregnated with animal juices) will do the same; but as for simple water, tho' it be kept a whole age, it never will.

But milk water is (according to my notion) a delicate animal dew, agreeable to our nature; which supplying a soft and amicable lymph, void of all saline, asperities, dilutes, adulcorates, contempers, and mingles the whole

Continued on page 139

When Big Ben looks "a little off"...

Antivert[®]/25 (meclizine HCl) 25 mg. Tablets for vertigo*

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

■ **Dosage for Vertigo***—The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

***INDICATIONS.** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG 
A division of Pfizer Pharmaceuticals
New York, New York 10017

Restoring Confidence in Mammography

An eloquent passage from the Hippocratic Oath states a basic precept of medicine: "The regimen I adopt shall be for the benefit of my patients according to my ability and judgment, and not for their hurt. . ." In practice, the art of medicine often lies not only in deciding what is beneficial for the patient and what is harmful, but in evaluating which regimen carries the greatest benefit and the least risk. This is the central issue in the current controversy concerning the advisability of mammography. Unfortunately, recent publicity about mammography guidelines has served more to confuse than to clarify.

The guidelines, which are advisory and not regulatory, are derived from the recommendations of committees appointed by the National Cancer Institute and charged with the responsibility of evaluating the possible benefit of screening to find early breast cancer versus the possible risk of inducing breast cancer by radiation exposure. Three groups of women, all of whom had been previously exposed to high or very high levels of radiation, are the basis for the initial statistical evaluation and subsequent predictions of risk.* These women included survivors of Hiroshima and Nagasaki atomic bombings, young women irradiated many years ago for postpartum mastitis, and another group of young tuberculosis patients who had undergone repeated fluoroscopies. The results of this retrospective statistical study suggest that while there may be a theoretical risk from low-dose radiation exposure (after a latency period of many years), the risk is extremely small for the individual woman. Extrapolating from very large doses to very small doses and indicating that there is no absolutely "safe" dose, it is speculated that if a woman has a mammogram, with approximately one rad absorbed by the breast, her chances of developing breast cancer theoretically change from an expected .07 (7.0 percent) to .0707 (7.07 percent). Stated more simply, (if these estimates

are applicable) her probability of eventually developing breast cancer is said to increase from one in 14.3 women to one in 14.1 women. Any risk, no matter how small, should not be completely dismissed. At the same time, we must not minimize the risk of spontaneous breast cancer, which remains the leading cancer killer of American women and the leading cause of death in women 39-44 years of age.

The only recognized approach to saving more lives from breast cancer is detection at a localized, highly curable stage, hopefully before the cancer becomes a mass large enough to palpate. Mammography is the only means available today to detect cancer at such an early stage. In the Breast Cancer Detection Demonstration Projects of the American Cancer Society and the National Cancer Institute, at least 45 percent of breast cancers have been detected by mammography alone; the tumors were not found by physical examination. For these minimal tumors, discoverable only by mammography, five-year survival rates of up to 95 percent have been reported, compared to only about 45-50 percent when breast cancer has spread to the axillary lymph nodes.

The guidelines advise annual screening for *all* women over 50 years old since, in this group, there is no question that the benefits clearly outweigh any minimal long-term risk from radiation. The concept that screening, which includes mammography, has little benefit in women under the age of 50 is based on a 10-year-old Health Insurance Plan study that found no reduction in case fatality rates for screened women in this age group. However, it is noteworthy that the HIP study also showed very few cancers in women under 50 that were detected by mammography alone.

The situation is quite different in the 27 ACS/NCI Breast Cancer Detection Demonstration Projects, largely because mammography techniques have improved vastly over the days since the HIP study was done. At least 233 breast cancers have already been discovered in women under 50 years of age; 100 were detected by mammography *alone*. If mammography had not been used, these early breast cancers would not have been detected at this time. Of the breast cancers found in the Demonstration projects, the incidence of uninvolved axillary lymph nodes is 79 percent for women under and over the age of 50—indicating that these patients have extremely

*Report of the Advisory Committee on the Biological Effects of Ionizing Radiations. National Academy of Sciences—National Research Council, Division of Medical Sciences, November, 1972.

early cancers and represent a highly curable group compared to the usual hospital population with breast cancer.

Who then should have mammography? Certainly, *all women over the age of 50*.

For women between the ages of 35 and 50, mammography should be done for those who are at higher risk of developing breast cancer because they have:

- chronic cystic mastitis, with or without pain;
- lumps and thickenings in the breast;
- nipple discharge or other nipple abnormalities;
- a personal history of breast cancer;
- a family history of breast cancer on the maternal or paternal side;
- a family history of breast cancer in sisters;
- early onset of menstruation;
- no history of pregnancy;
- first full-term pregnancy at age 30 or older;
- breast surgery scheduled for diagnostic purposes;
- fear of breast cancer that requires the reassurance of a negative examination.

Clinicians report that approximately 80 percent of women between 35 and 50 years of age will belong to one or another of the above groups that can benefit from mammography.

The remaining women who are 35-50 years old and those under the age of 35 who have no particular breast problem should be taught the proper technique of breast self-examination and urged to perform it regularly every month. In addition, periodic clinical examinations are warranted. However, many diagnostic radiologists and breast cancer specialists believe that even

totally asymptomatic women 35-50 years of age and those under 35 years with a specific breast problem should have at least a baseline mammogram that can be used for later comparisons.

Sadly, many American women have been frightened into believing that mammography represents only a danger, rather than a benefit. This has led a considerable number of women, both over and under the age of 50, to refuse mammography in the presence of symptoms and obvious physical findings and even prior to breast surgery. Any lost opportunity for the earlier diagnosis of breast cancer with its more favorable prognosis must be the current great concern of all physicians.

Of course, the minimum dose required for good mammography should always be used. New equipment is already reducing radiation exposure to extremely low levels that are only a small fraction of the dosage needed 10 years ago.

Breast cancer is so serious a problem, and mammography so valuable a clinical diagnostic aid, that judgments based on fragmentary, tentative or inconclusive data should be avoided. Dr. Francis D. Moore, Moseley Professor of Surgery at Harvard, discussing mass screening for breast cancer by mammography in the September, 1976 issue of *Annals of Surgery* stated: "... one woman in the prime of life found to have an unsuspected cancer that's removed when it's very favorable surgically is a triumph." I concur. *Published in "CA—A CANCER JOURNAL FOR CLINICIANS" Vol. 26, No. 6 Nov./Dec. 1976.*

ARTHUR I. HOLLEB, M.D.
American Cancer Society

* * *

Notes on History . . .

Continued from page 134

mass of blood, renders it uniformly liquid, benign, homogeneous; and so notably assists it to circulate freely though the minute passages, break open obstructions, cast off excrements, subdue its fervors and cherish and nourish the parts.

But to get such a fine water in perfection, I should advise, to receive the milk under the cow in a glass cucurbit, to close its head upon it presently while warm; to distill it with as low a degree of fire as will just serve to make it rise; to draw no more at a time

than the patient is to drink as a dose, and to give it as soon as distilled. (pasteurized milk?)

One reads Dr. Fuller's book and cannot help but wonder what doctors of 2300 A.D. will think of present day medical treatment and surgical procedures. Most likely we will appear rather primitive to them.

RUTLEDGE MILLER, M.D.
P. O. Box 1149
Blowing Rock, N.C.
(formerly of Johnson City, Tenn.)

Family Practice Residencies Now Top 300

More than 300 family practice residencies now are operating in university medical centers and other teaching hospitals throughout the United States. Family practice residencies are 3-year training programs designed to give the family physician-to-be training in his new specialty. Though in many ways these residencies are similar to other specialty residencies, they do differ significantly in the amount of ambulatory experience the resident receives. This ambulatory training is achieved in model family practice centers, which approximate the conditions of actual practice. In them, residents care for patient-families on a continuing basis over the 3-year period.

The 303 residencies currently are training more than 4,600 residents, with the U.S. graduate first year fill-rate running at more than 90 percent. The American Academy of Family Physicians, national association of family doctors, projects that more than 340 such training programs will be in operation by the end of 1977. The goal is to have one-fourth of all medical school graduates entering family practice residencies by 1980.

New Rabies Vaccine Proves Safe, Effective

An effective and simplified new treatment for rabies is reported in the Dec. 13 Journal of the American Medical Association.

The new treatment involves only half a dozen injections, with virtually no side effects. Present methods involve 14 to 21 injections, with frequent severe side reactions.

Hilary Koprowski, M.D., of the Wistar Institute of Anatomy and Biology, World Health Organization Collaborating Center for Reference and Research in Rabies, Philadelphia, reports on field trials in Iran in which 45 persons severely bitten by rabid dogs and wolves were treated with a new rabies vaccine produced in cultures of human diploid cells. They also received one injection each of rabies immune serum.

"This treatment," says Dr. Koprowski, "in contrast with past experience with other vaccines, resulted in protection of all individuals against rabies." The new vaccine, produced by the Institut Merieux in Lyon, France, is known as human diploid cell vaccine (HDCV). It was sent to the WHO Collaborating Center for Rabies Research in Tehran for field trials. It was used successfully on 45 persons bitten by six dogs and two wolves in rural areas of northwestern Iran between June, 1975, and January, 1976.

Violence in Tv

The AMA announced a grant of \$25,000 to the National Citizens Committee for Broadcasting, a media reform group based in Washington, D.C., concerned with documenting the amount of television violence portrayed in prime time network television. AMA EVP James H. Sammons, M.D., said the grant "represents a strong commitment by the AMA to endorse and finance activities that will encourage the industry to reduce the amount of violence in TV programming."

AMA Reinsurance

The AMA's Reinsurance Company—American Medical Assurance Co.—officially went into business with the signing of a service agreement with the Kemper Reinsurance Co. Kemper will handle AMACO's accounting, taxes and insurance commission statements, provide underwriting consultation, and manage investments. AMACO will provide reinsurance for qualifying physician-owned medical liability companies.

National Council on Drugs Organized

The National Council on Drugs, an independent panel of recognized drug experts, held its organizational meeting in Washington, D.C. Represented at the meeting were the AMA, American Society for Clinical Pharmacology and Therapeutics, American Society for Pharmacology and Experimental Therapeutics, American Dental Assn., American Osteopathic Assn., American Nurses Assn., National Medical Assn., Pharmaceutical Manufacturers Assn., and American Pharmaceutical Assn. The AMA helped organize the council when the National Academy of Sciences-National Research Council terminated its Drug Research Board. The council will act in an advisory capacity to the government, the scientific community, and the public on matters pertaining to the development and use of drugs.

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The American Medical Association—Working for a Healthier America, formerly *The Little-Known Story of How America's Physicians Work Together to Improve Your Health*. Copies of the pamphlet, Comp. 43, are complimentary . . . *Standard Nomenclature of Athletic Injuries*, OP 43, for physicians practicing internal medicine and surgery as well as for specialists involved in the study and care of athletes. Cost is \$2.00 ea. for 1-10 copies; \$1.80 ea. for 11-49 copies; and \$1.60 ea. for 50 or more. . . "To All My Patients," OP 33, physician's fee plaque for wall or desk. Cost is \$5.50 ea. for 1-10 plaques; \$4.95 ea. for 11-49; and \$4.40 ea. for 50 or more. Write Order Dept., AMA Headquarters.

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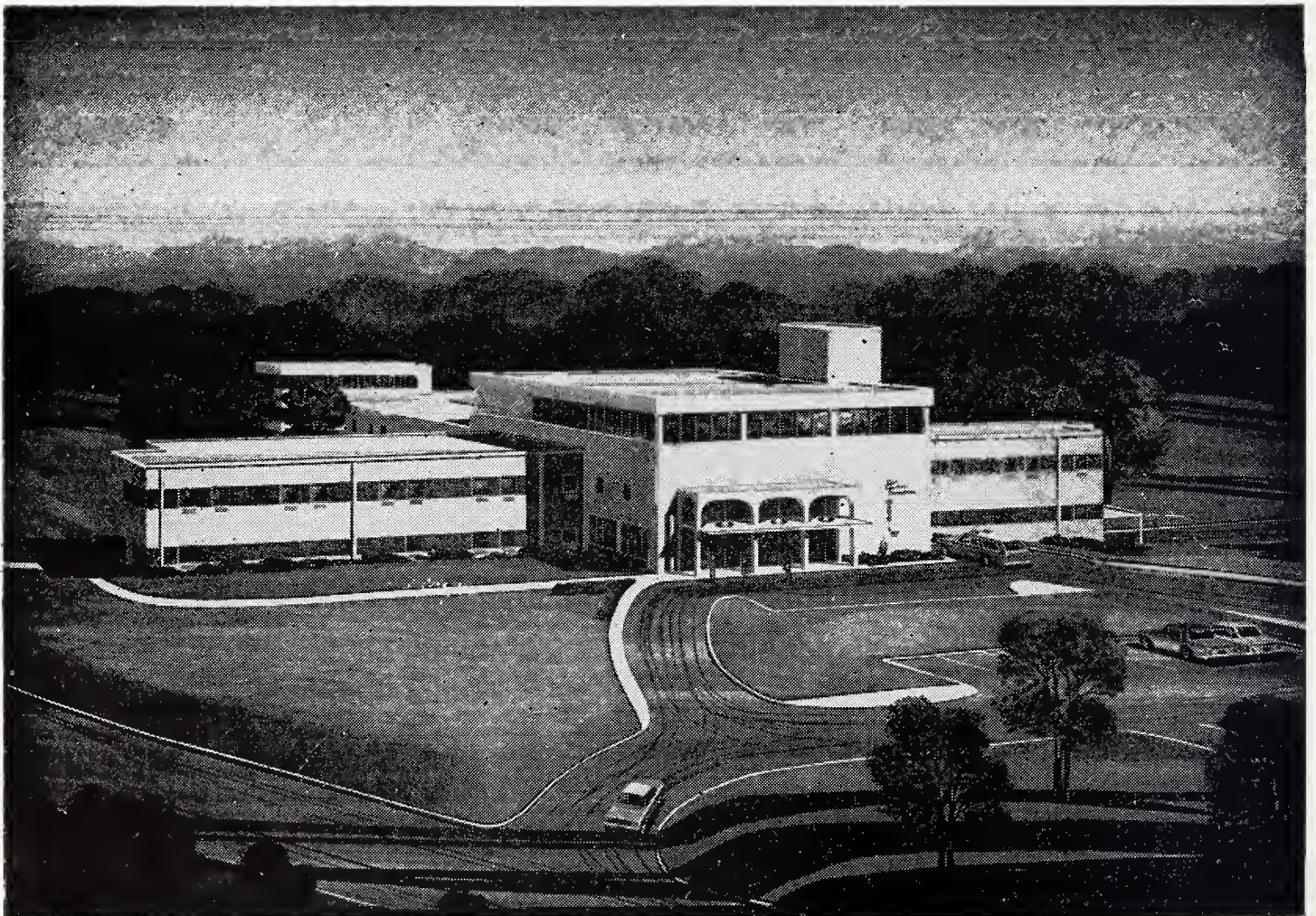
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Abortions in Tennessee — 1975

ALAN R. HINMAN, M.D.*

Introduction

The Supreme Court decision of January 23, 1973 invalidated state laws restricting access to abortion and enabled women seeking abortion during the first trimester to do so at their own desire, provided, however, that the abortion was performed by a licensed physician. Following the first trimester, states were empowered to regulate abortions to protect the health of the mother and, in the third trimester, to restrict access to abortion. The Tennessee Legislature enacted a law (TCA 39-301) which provided that second trimester abortions were to be performed in hospitals and that third trimester abortions would be permitted only to save the life of the mother. The law (TCA 39-303) also requires physicians to report abortions "at such time and in such form as the Commissioner (of Health) may reasonably prescribe. Each such record and report shall be confidential in nature and shall be inaccessible to the public." The report form currently in use (Appendix 1) includes certain information about the patient, procedure, and location of the abortion, but does not identify the patient directly.

For the period July-December, 1973, 1,682 legal abortions were reported to the Tennessee Department of Public Health. In calendar 1974 this number rose to 7,406 and in 1975 to 11,081. The purpose of this paper is to present data regarding the 11,081 abortions reported for calendar year 1975.

Materials and Methods

Information was obtained from the Tennessee Department of Public Health Form 31.27, the

*Assistant Commissioner, Director, Bureau of Preventive and Medical Services, Tennessee Department of Public Health, Nashville, Tenn. 37219.

"Induced Abortion Report" (Appendix 1). These reports are on file in the Center for Health Statistics, Tennessee Department of Public Health.

Provisional reports regarding live births during 1975 were used to calculate ratios of induced abortions per 1,000 live births. Estimated 1975 populations were used for relating abortion ratios to county populations. Tables 1 and 8 reflect total abortions performed in Tennessee in 1975 and 1974 respectively. Tables 2 through 7 and Figure 1 reflect abortions performed in Tennessee to Tennessee residents.

TABLE 1
INDUCED ABORTIONS ACCORDING TO RACE AND RESIDENCE, TENNESSEE, 1975

State of Residence	Total		Abortions		
	No.	%	Number by Race		
			White	Non-White	Un-Known
Tennessee	9,283	83.8	6,989	2,069	225
Kentucky	525	4.7	454	64	7
Mississippi	374	3.4	266	98	10
Arkansas	278	2.5	237	29	12
Alabama	188	1.7	152	35	1
Georgia	167	1.5	147	16	4
All Others (19)	219	2.0	200	15	4
Unknown	47	0.4	38	4	5
TOTAL	11,081	100.0	8,483	2,330	268

TABLE 2
INDUCED ABORTIONS ACCORDING TO TYPE OF FACILITY, TENNESSEE RESIDENTS, 1975

Type of Facility	Abortions	
	No.	%
Abortion Clinic	7,624	82.1
Hospital	1,270	13.7
Physician's Office	294	3.2
Other Clinic	95	1.0
TOTAL	9,283	100.0

Results

Table 1 shows the number of abortions performed by race and by state of residence. Nearly 85 percent of all abortions performed in Tennessee in 1975 were performed on Tennessee residents; three-quarters were performed on white

women. Over 80 percent were performed in abortion clinics, with 13 percent being performed in hospitals (Table 2). A total of 19 hospitals in 10 counties reported performing abortions. Table 3 shows the frequency of various methods of inducing abortion according to gestational age. More than 90 percent of abortions were performed during the first trimester, and only one

Appendix 1—Form Used For Reporting Induced Abortions INDUCED ABORTION REPORT Tennessee Department of Public Health

PLACE ABORTION OCCURRED:

Name of Facility: _____

County where facility is located _____

1. ☐ Hospital
2. ☐ Clinic
3. ☐ Physician's Office
4. ☐ Other

PATIENT INFORMATION:

Usual county and state of residence (location of home - NOT mailing address)

County _____ State _____

Date of Birth: _____ Age: _____

- Race:
1. ☐ White
 2. ☐ Black
 3. ☐ Other (specify) _____

- Marital Status:
- | | |
|---|---------------------------------------|
| 1. ☐ Never Married | 4. ☐ Divorced |
| 2. ☐ Currently Married | 5. ☐ Separated |
| 3. ☐ Widowed | 6. ☐ Unknown |

4. ☐ Unknown _____

Previous Deliveries, Now Living _____ Number of Previous Induced Abortions _____

MEDICAL INFORMATION:

Date Last Normal Menses Began: Mo. _____ Day _____ Yr. _____

Date of Abortion: Mo. _____ Day _____ Yr. _____

Physician's Estimate of Length of Gestation _____ weeks

Type of Abortion Procedure:

1. ☐ Suction Curettage
2. ☐ Sharp Curettage
3. ☐ Amniotic Fluid Exchange
4. ☐ Hysterotomy
5. ☐ Hysterectomy
6. ☐ Other (Specify) _____

Maternal Health and Family Planning
PHFP Form No. 31-27
Issued 9-73

TABLE 3
INDUCED ABORTIONS ACCORDING TO PRIMARY
PROCEDURE AND WEEKS OF GESTATION, TENNESSEE
RESIDENTS, TENNESSEE, 1975*

Primary Procedure	Weeks of Gestation						Un- Known
	Total	<-8	9-12	13-15	16-19	20+	
Suction							
Curettage	8,793	4,940	3,711	25	5	1	111
Sharp							
Curettage	40	24	14	1	0	1	0
Amniotic							
Fluid Exc.	176	0	2	14	151	2	7
Hysterotomy	3	1	1	0	1	0	0
Hysterectomy	12	2	2	7	1	0	0
Prostaglandins	163	0	5	28	114	11	5
Other	30	3	0	8	15	4	0
Unknown	66	42	16	0	4	0	4
TOTAL	9,283	5,012	3,751	83	291	19	127

*Calculated using reported date of last menstrual period.

TABLE 6
INDUCED ABORTIONS, LIVE BIRTHS, AND
ABORTIONS PER 1,000 LIVE BIRTHS
ACCORDING TO POPULATION OF COUNTY
OF RESIDENCE,
TENNESSEE, 1975

Population	No. of Counties	1975 Est. Pop.	Legal Abortions	Live Births	Abortions/ 1,000 Live Births
<25,000	50	661,198	577	9,254	62
25,000-49,999	31	1,037,594	1,313	14,074	93
50,000-99,999	9	604,198	1,240	8,316	149
100,000+	5	1,885,010	6,118	28,246	216
TOTAL	95	4,188,000	9,248*	59,890	154*

*ONLY INCLUDES PATIENTS IN WHOM COUNTY OF
 RESIDENCE IS KNOWN

TABLE 4
INDUCED ABORTIONS ACCORDING TO AGE AND MARITAL STATUS, TENNESSEE RESIDENTS,
TENNESSEE, 1975

Marital Status	Total	Age of Patient							Unknown
		<15	15-19	20-24	25-29	30-34	35-39	40+	
Never Married	5,186	158	2,779	1,755	356	75	43	7	13
Currently Married	2,139	6	293	664	568	345	190	65	8
Widowed	84	0	2	17	31	17	15	2	0
Divorced	1,193	0	71	423	403	187	83	24	2
Separated	530	0	67	215	147	66	29	4	2
Unknown	151	2	45	55	28	10	8	2	1
TOTAL	9,283	166	3,257	3,129	1,533	700	368	104	26

TABLE 5
INDUCED ABORTIONS, LIVE BIRTHS AND ABORTION
RATIO* ACCORDING TO AGE, TENNESSEE RESIDENTS,
TENNESSEE, 1975

Age of Patient	Number of Abortions	Live Births	Abortion Ratio
<15	166	415	400.0
15-19	3,257	14,340	227.1
20-24	3,129	21,086	148.4
25-29	1,533	15,612	98.2
30-34	700	5,977	117.1
35-39	368	1,947	189.0
40+	104	504	206.3
Unknown	26	9	—
TOTAL	9,283	59,890	155.0

*Computed as $\frac{\text{Number of Abortions}}{\text{Live Births}} \times 1,000$

TABLE 8
INDUCED ABORTIONS AND PERCENT
OF ABORTION NEED MET,
TENNESSEE AND USA, 1974

	Tennessee		USA
	TDPH Reports	AGI Estimates	
Reported Abortions	7,406	14,200	899,850
Abortions Needed			
Low Estimate*	25,140	25,140	1,257,970
High Estimate°	35,780	35,780	1,768,440
Percent of Need Met			
Low Estimate	29%	56%	71%
High Estimate	20%	39%	50%

*Based on California 1973 Abortion Patterns

°Based on New York City 1971 Abortion Patterns

TABLE 7
INDUCED ABORTIONS, LIVE BIRTHS AND ABORTION RATIO° ACCORDING
TO RACE AND MARITAL STATUS, TENNESSEE RESIDENTS,
TENNESSEE, 1975

Race	Abortions	Total*	Abortion Ratio	Never Married			Ever Married ⁺⁺		
		Live Births		Abortions	Live Births ^o	Abortion Ratio	Abortions	Live Births ⁺	Abortion Ratio
WHITE	6,912	46,235	149.5	3,801	2,751	1381.7	3,111	43,484	71.5
NON-WHITE	2,021	13,484	149.9	1,277	6,893	185.3	744	6,591	112.9
TOTAL**	8,933	59,719	149.6	5,078	9,644	526.5	3,855	50,075	77.0

*Excludes marital status not stated

°Computed as $\frac{\text{number of abortions}}{\text{number of live births}} \times 1,000$

Defined on birth certificate as illegitimate

**Excludes race not stated

++ Includes currently married, separated, divorced, and widowed

+ Defined on birth certificate as legitimate

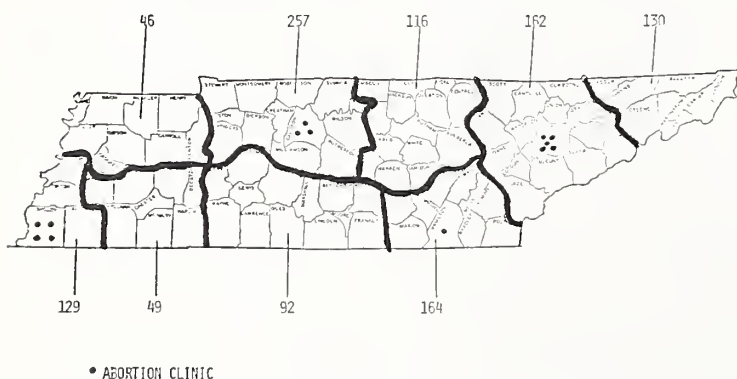
was reported to have occurred in the third trimester. Suction curettage was by far the most common procedure for inducing abortion with 94 percent of all abortions being performed by this means. Almost three-fifths (55 percent) of abortions were performed on never married women and less than 25 percent were performed on women who were currently married (Table 4). Over 40 percent of women undergoing abortion had one or more living children and 11 percent had had at least one previous abortion.

More than one-third of abortions were performed on women less than twenty years old. Table 5 shows the ratio of abortions per 1,000 live births for women of varying ages. This indicates a much higher proportion of pregnancies terminated by abortion in those under fifteen than in those 25-29 and also shows an increasing likelihood of abortion (given pregnancy) in women above 30. Women living in populous counties were more likely to have pregnancies terminated by abortion than women living in more rural counties, as shown in Table 6.

Women who had never been married were much more likely to terminate pregnancy with abortion than women who had ever been married as shown in Table 7.

Figure 1 depicts the ratio of abortions per 1,000 live births in the nine planning regions of Tennessee and also shows the location of the thirteen abortion clinics known in operation. Striking differences in the ratio of abortions to live births are seen ranging from 46 abortions per 1,000 live births in the Northwest Region to 257 abortions per 1,000 live births in the Mid-Cumberland Region.

FIGURE 1—LOCATION OF ABORTION CLINICS AND LEGAL ABORTIONS PER 1,000 LIVE BIRTHS ACCORDING TO PLANNING REGION, TENNESSEE, 1975.



Discussion

The first thing that must be realized about these data is that they represent a considerable underestimation of the true number of abortions performed in the State of Tennessee. Although it is very likely that the vast majority of abortions were performed in abortion clinics, it seems unlikely that as few as 294 were performed in physician's offices. A striking indication of the degree of under-reporting is apparent from the surveys done by the Alan Guttmacher Institute, (AGI) which surveys all hospitals and physicians known or thought possibly to be performing abortions. For 1974 the AGI estimated that 14,200 abortions were performed in Tennessee.¹ In that same year, only 7,406 were reported to the Tennessee Department of Public Health. If the AGI figures are correct, the degree of under-reporting in Tennessee is nearly 50 percent. It is possible that the AGI figures are an overestimate, but it is unlikely that the degree of overestimation plays a very great role in the discrepancy between their estimates and the number of abortions reported.

Corroboration of the severity of under-reporting is seen in the fact that in 1974 and 1975 one known abortion clinic in Memphis had not reported any abortions to the Tennessee Department of Public Health. In 1975, only about 2,000 abortions were reported from the entire portion of the state west of the Tennessee River. Beginning with 1976, the previously silent clinic in Memphis has begun to report and for the first quarter of 1976 reported a total of 969 abortions. This would give an annual rate of approximately 4,000 for that one facility, more than double the 1975 total reported from West Tennessee.

Because of the problem of under-reporting, caution must be used in interpreting Tennessee's abortion statistics, particularly in comparing ratios of abortions to live births. Since the reporting of live births is considered to be virtually complete, underestimation of the number of abortions performed in any particular group can substantially diminish the abortion ratio for a particular area or group. It seems likely that this may be a partial explanation for the marked discrepancy in the abortion ratios seen between Middle and West Tennessee. This may also account for the observed difference in abortion ratios for whites and non-whites. In the nation as a whole, non-whites have a somewhat higher abortion rate than do whites. In Tennessee, this

is not the case. Since nearly 60 percent of non-whites in Tennessee live west of the Tennessee River and since under-reporting is known to be particularly severe in that part of the state, it may well be that blacks are selectively under-represented in the category of abortions performed. Under-reporting may also account for the fact that Tennessee's abortion rate is lower than that of the nation as a whole.² One point that must be emphasized is that if reporting were complete, the ratio of abortions to live births could only be increased for whatever group was being considered.

The data on length of gestation and procedure performed indicate that Tennessee physicians are well aware of the desirability of performing abortions early in pregnancy and of the superiority of suction curettage over other techniques for early abortion. Additionally, the fact that only two abortions performed after the 20th week of gestation were performed by curettage suggests that physicians are generally aware that the risk of performing curettage abortions increases substantially later in pregnancy.^{2,3}

The fact that over 40 percent of women obtaining abortions have at least one living child indicates that there was one excellent opportunity for delivering family planning services which was not capitalized upon—the immediate postpartum period. Similarly, the fact that one out of nine abortions was performed to a woman who had previously had at least one abortion suggests that more emphasis needs to be given to the provision of contraceptive information and services at the time of abortion. That nearly $\frac{3}{4}$ of abortions were performed on women not currently married indicates a need for greater availability of and utilization of family planning services. The extremely high ratio of abortions per 1,000 live births for young women, particularly unmarried young women, indicates the continuing need to provide contraceptive services to those who are clearly sexually active.

The uneven distribution of abortion ratios throughout the state shown in Table 6 and Figure 1 suggests that there is not uniform availability of abortion services and/or not uniform desire to terminate pregnancy by abortion. It is difficult to know what the "need" for abortions is in Tennessee, but the AGI has made projections based on the abortion-seeking behavior of California women in 1973 ("low" estimate) and New York women in 1971 ("high" estimate).¹ These mea-

sures were picked as they represented actual utilization of abortion services by residents of the 2 states at a time when abortions had been legally available for some time. There was a substantial range of utilization (New York City residents having $1\frac{1}{2}$ times higher rate than Californians) which seemed wide enough to encompass expected nationwide rates given ready access to services. Assuming the "need" criteria developed by AGI and using the number of abortions officially reported in Tennessee in 1974, at best 29 percent of the "need" was met (Table 8). Using AGI figures the highest proportion of "need" met was 56 percent. This compares with a nationwide proportion of 71 percent of "need" met based on low estimates of need.

Summary

1. In 1975, 11,081 abortions were reported as being performed in Tennessee, 9,283 of them to Tennessee residents. This number represents a considerable underestimate of the number of abortions truly performed.
2. The vast majority of abortions were performed in abortion clinics, during the first trimester, using suction curettage.
3. About $\frac{3}{4}$ of those receiving abortions were not married at the time of abortion.
4. There is substantial variation in the proportion of pregnancies terminated by abortion in differing parts of the state.

Afterword

During the 1975-1976 legislative session a law was enacted (Chapter 471, Public Acts of 1976) providing for the regulation of ambulatory surgical treatment centers (including abortion clinics). Regulations are presently being drafted to implement this law. It seems likely that some change in the format for reporting abortions may occur as a consequence.

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Non-Medical Functions of the Nashville Journal of Medicine and Surgery, 1851-1861

JAMES X. CORGAN, Ph.D.*

Introduction

In the years before the Civil War one great strength of the developing medical professions in Tennessee was the growth of locally oriented professional journals. In Middle Tennessee the dominant antebellum journal was the *Nashville Journal of Medicine and Surgery*. It began in 1851 as a house organ of the Medical Department of the University of Nashville and continued until war forced its suspension in 1861. A second series started in postbellum years.

Hamer discussed contributions the first series of the *Nashville Journal* made to the growth of professional medicine in Tennessee.¹ In addition to its well documented role in medical affairs, the *Nashville Journal* also played at least two non-medical roles in the culture of its day. These have not been studied. One non-medical role was the publication of lengthy articles in astronomy, botany, and other scientific fields. The second role was to editorialize on cultural issues. These secondary functions of the *Nashville Journal* are briefly examined in the paragraphs below.

Cultural Issues

When the first number of the *Nashville Journal of Medicine and Surgery* appeared in February of 1851 it had no competition in the middle region of Tennessee. The *Nashville Journal* was not only the sole medical journal published in Middle Tennessee, it was the only scientific or technical journal of any kind.² Perhaps a lack of other locally oriented journals gave the editors of the *Nashville Journal* a special sense of obligation. In any event, the journal emerged as a strong editorial voice favoring a broad spectrum of cultural activities. In the later antebellum years when other scientific and technical journals were also published in Nashville, the *Nashville Journal* continued to maintain a broad interest in non-medical affairs. During its ten antebellum years

the journal supported too many non-medical causes to permit topic-by-topic analysis. Two are briefly examined here.

In the spring of 1857 there was a move underway to establish a Nashville Academy of Natural Science. The *Nashville Journal* lent its support through an editorial.³ There is no indication that the Academy came into being. A year after the Academy effort, the editors were back again supporting another good cause: State purchase of the Troost collection. In 1827 Gerard Troost, M.D., opened a commercial enterprise called the Nashville Natural History Museum. Troost had once been the mineral collector for a European king.⁴ His collection had thousands of rocks and minerals, hundreds of prepared birds, an assortment of reptiles, other natural history specimens, and equipment to display basic principles of chemistry and physics. Troost's museum operated in Nashville for about five years, ending in 1832.

In 1850 Troost died in a Nashville cholera epidemic and his estate remained unsettled for many years. By 1858 the Tennessee Legislature was considering a proposal to purchase Troost's collection and use it as a nucleus in developing a state-owned natural history cabinet. Editors of the *Nashville Journal* strongly supported state acquisition,⁵ but the movement failed and the collection was eventually sold to an institution in Louisville, Ky.

Like the Academy of Science movement and the move to acquire the Troost collection, nothing came of most worthy causes supported by the *Nashville Journal*. One might ask, "Was editorial support significant?"

It is hard to look back across 120 or more years and view an editorial within the context of its time. Obviously editorial writers believed their journal played a significant role in shaping public opinion. Perhaps a succinct editorial reached the harried doctor with a big practice or the influential rural doctor without intellectu-

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ally oriented local newspapers. Whatever impact the *Nashville Journal* had or failed to have on the general intellectual history of Tennessee, it had a clear and easily documented influence on the history of science outside the medical sphere.

Science

Throughout 21 antebellum volumes the *Nashville Journal* maintained very high standards in publishing articles that were not focused on exclusively medical topics. In early volumes the only non-medical topic discussed was meteorology. Stewart presented weather statistics for Lebanon that were fairly sophisticated for the era, including morning, mid-day, and evening readings of both pressure and temperature.⁶ Stewart's reports appeared at a time when data were being compiled on the climatology of the United States and his statistics were used in characterizing the climate of Tennessee.⁷ The only other weather information published in the *Nashville Journal* was Tavel's statistics for the late 1850's.⁸ Both sets of weather data might prove useful to modern students of floods, frosts, and other environmental phenomena.

The principal non-medical topic treated in antebellum issues of the *Nashville Journal* can be characterized in broad terms as Natural Philosophy. About 1853 the senior editor of the *Nashville Journal*, Dr. William K. Bowling, met William Ferrel, a creative genius who had taught himself advanced mathematics.⁹ Perhaps because the *Nashville Journal* was the only scientific journal published in the area, Dr. Bowling and his colleagues encouraged Ferrel to use their medical journal to publish mathematically oriented papers in the physical sciences.

During the next few years Ferrel produced a truly extraordinary group of articles.¹⁰⁻¹⁵ One of Ferrel's more impressive papers claimed to be, and apparently was, the first mathematical description of the motion of the gyroscope.¹⁵ Another was an early exploration of the physical basis for stereoscopic vision.¹¹ Ferrel's masterpiece was a pioneer mathematical description of the influence of the earth's rotation on the movement of bodies at the earth's surfaces.¹⁴ Knowledge of this interaction, which is generally called the Coriolis Effect, is essential to weather prediction and to understanding a broad range of physical phenomena. Burstyn provides a comprehensive review of Ferrel's contributions.¹⁶

Ferrel's mathematical papers became the most

widely known non-medical contributions of the *Nashville Journal* but there were a few other non-medical or quasi-medical papers of more local significance. While the journal almost avoided the Medical Topography craze, which blended medicine with geology and botany, the editors did publish two topographically oriented articles.¹⁷⁻¹⁸ Finally the last article that was not exclusively medical was a lengthy treatise on the medical botany of Nashville.¹⁹ Both this article and the two earlier studies in medical topography were on the boundary line between medicine and natural history. While articles of this sort were common in some antebellum medical journals, they were clearly outside the normal scope of the *Nashville Journal*. All three natural history-oriented articles contain botanical records that may interest contemporary biogeographers.

Summary and Conclusions

Earlier historical studies of The *Nashville Journal of Medicine and Surgery* focus on medical content and treat that aspect of the journal well. Clearly the *Nashville Journal* contributed greatly to the professionalization of medicine in Tennessee, but the journal did more than advance medicine. It became involved in the general culture. This broad cultural involvement lends the journal another kind of historical importance. Today, old editorials provide a unique insight into little known lost causes of the past, like the Nashville Academy of Natural Science. The journal also contains potentially useful data on Nineteenth Century weather and on the distribution of plants in antebellum time. Further, a few non-medical articles attracted national and international attention. Through publication of these studies, the *Nashville Journal* made a very general contribution to the growth of Nineteenth Century culture.

Acknowledgment

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Theophylline, a Review

BURTON M. RUDOLPH, M.D.*

The xanthine drug, theophylline, combined with ethylenediamine (aminophylline) has been shown to be one of the most useful drugs for the symptomatic relief of both acute and chronic obstructive lung disease. Its long continued use is indicative of its value. Although aminophylline has been administered orally, rectally, intramuscularly, and intravenously, its bronchodilating effect is most striking by the intravenous route.

"Status asthmaticus" was first successfully treated by intravenous aminophylline in 1931: 0.48 grams in 10 cubic centimeters saline injected slowly was very successful with least serious reactions in "adrenalin fast" asthmatics. This can be defined as the failure of bronchial response to three subcutaneous injections of 1:1000 aqueous epinephrine in therapeutic doses administered at 15 minute intervals.

Theophylline (1,3-dimethylxanthine) is a naturally occurring alkaloid closely related to caffeine. See figure 1.

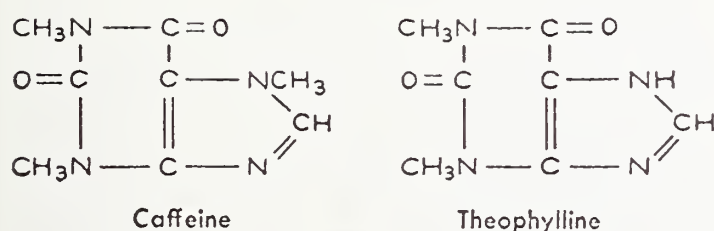


FIG. 1

The pharmacologic actions of theophylline include stimulation of respiration, augmentation of cardiac ionotropy and chronotropy, relaxation of smooth muscle, including that in the bronchi and blood vessels other than cerebral vessels, and diuresis. It has been used in a number of diseases, but its main use has been in the treatment of reversible airway obstruction and as an adjunct to the therapy of acute left ventricular failure.

The actions of theophylline are probably mediated through inhibition of phosphodiesterase, the enzyme which degrades cyclic 3' 5' -AMP to 5' -adenosine monophosphate (5' -AMP). This results in an increase in intracellular cyclic AMP (cyclic 3', 5' -adenosine monophosphate), which

mediates smooth-muscle relaxation and inhibits the release of histamine by mast cells. It has been shown to interact synergistically with other agents that increase intracellular cyclic AMP through the stimulation of adenylcyclase (e.g., catecholamines and ephedrine).

Theophylline, 1, 3-dimethylxanthine is metabolized primarily by oxidation without dimethylation. The main excretory products are 1,3-dimethyluric acid, 1-methyl-uric acid, and 3-methylxanthine. Only a small fraction is excreted unchanged. The system of microsomal enzymes involved in the oxidative metabolism of drugs and steroids contains 3 components: a hemo-protein called cytochrome P 450 that binds carbon monoxide, an NADPH-dependent reductase and phosphatidylcholine. Cytochrome P 450 has attracted considerable attention because its concentration is affected by common drugs, notably phenobarbital.

Recent evidence suggests that the metabolism of theophylline is variable between subjects so that identical doses may occasion widely different blood levels. Theophylline toxicity may occur in some subjects at dosage levels that are inadequate for therapeutic effect in other subjects. In patients with congestive heart failure and severe liver disease the disposition of theophylline changes. The plasma half-life increases as the clearance and elimination decreases whereas the apparent volume of distribution may be unchanged.

After first being reported as a therapeutic agent in asthma in 1921 and rediscovered in the 1930's, theophylline rapidly became popular as an oral bronchodilator administered commonly in fixed dose combinations with a sympathomimetic agent such as ephedrine in addition to a sedative and sometimes an "expectorant." The plethora of theophylline preparations may have been either a cause or a result of the irrational use of theophylline. Questions regarding the absorption and tolerance of oral theophylline have nurtured interest in alternate forms and routes of administration. Most of these, however, are unnecessary and some are of little therapeutic value. For the patient who requires chronic medication, however, there appears to be little indication for other than an oral preparation. From the

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available literature it appears that there is adequate absorption of a wide variety of oral theophylline products, including free theophylline. Theophylline salts are clinically and pharmacologically identical to equivalent amounts of free theophylline since they are readily dissociable at physiologic pH's. Use of principles based on pharmacologic data presented in the past and present literature leads to the following guidelines for oral bronchodilator therapy: theophylline is most effective for chronic asthma when administered continuously in individualized doses to accommodate variation in metabolism (serum theophylline concentrations between 10 and 20 micrograms per milliliter appear optimal); theophylline is generally as effective with less risk of adverse effects when given as a single drug rather than as a fixed-dose combination with ephedrine; and since both toxicity and effectiveness generally appear to be a function of serum theophylline concentration rather than the specific theophylline preparation, selection of a product becomes simplified. Aminophylline tablets, USP, are readily available commercially in plain, uncoated form, with adequate data over a 24-year period documenting their ability to achieve reliable therapeutic serum concentration. Rational specialized theophylline preparations would include nonalcoholic solutions or suspensions for pediatric use. Because of the relatively short half-life of theophylline, sustained release preparations would be desirable. It has been thought that absorption of the currently available sustained release products is not sufficiently reliable to warrant common usage. However, our data at the University of Tennessee Memorial Research Center and Hospital confirms the reliability of one of these sustained release preparations to maintain a rather consistent serum theophylline level when administered at time intervals of 6, 8, or 12 hours, dependent on the patient's size and metabolism of theophylline. We have used a gas chromatographic method, which is highly reproducible and specific for determining serum theophylline levels. This preparation, as well as one other sustained release product, have clinically been very efficacious in providing long interval bronchodilation.

Intravenous aminophylline is used for the patient with acute bronchospasm. When it becomes necessary to hospitalize such a patient because

of the persistence of severe bronchospasm, a more favorable response to intravenous aminophylline can be obtained if a constant serum concentration is maintained. A practical approach to achieving this is by the use of the two-compartment open-system model. See figure 2.

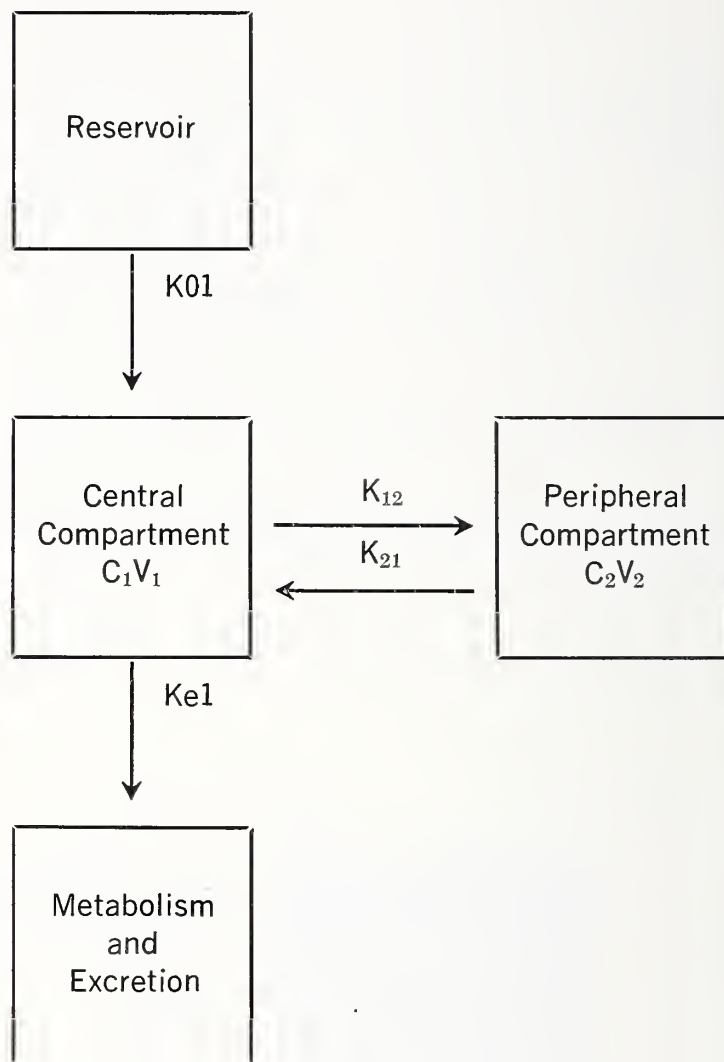


FIG. 2

This utilizes an intravenous bolus and continuous infusion to obtain a plateau situation. The fastest way to obtain this has been shown to result from setting the maintenance infusion rate equal to beta times the initial bolus, where beta is the slower disposition constant. Theophylline has a plasma half-life of 4.44 hours associated with $\beta = 0.156^{-1}$. Without an initial loading dose it would require 4.44 hours to reach 50 percent and 15 hours to reach 90 percent of plateau concentration.

The model is represented by a central compartment of volume (V_1) with drug concentration (C_1) and a peripheral compartment (V_2) and concentration (C_2). Drug is introduced into the central compartment from the reservoir, and first-order rate constants K_{12} and K_{21} govern

distribution between compartments. Metabolism and excretion from the central compartment are represented by the first-order rate constant K_{el} . K_{01} is set so that $K_{01} = Q/V_1$. The individual problems of bolus injection (R) and continuous infusion (Q) in this system have solutions which are well known. One way of relating bolus and constant infusion, as can be noted from the above, is by the formula $Q = R\beta$.

In a study of a number of patients the mean beta disposition constant was $0.159 \pm 0.042 \text{ hr}^{-1}$, corresponding to a plasma one-half life of $4.36 \pm 1.15 \text{ hr}$.

The overall elimination rate constant, K_{el} , was $0.314 \pm 0.199 \text{ hr}^{-1}$, and the calculated apparent volume of the central or plasma compartment, V_1 , was 0.300 ± 0.144 per kilogram. Since all elimination is assumed to occur from the central compartment, the product $K_{el} \times V_1$ is the plasma clearance rate for theophylline. The mean clearance rate in this study was 0.0719 ± 0.0179 liter per kilogram per hour.

To maintain a constant plasma concentration of a drug such as theophylline, it is necessary to administer as much of the drug as is being eliminated over that time interval. In kinetic terms this is expressed by $C_p \times K_{el} \times V_1$ or the plasma concentration, C_p , times the plasma clearance rate, $K_{el} \times V_1$. Since the plasma clearance rate is 0.0719 liter per kilogram per hour, the calculated infusion rate to achieve a plasma theophylline concentration of 10 milligrams per liter in a 70 kilogram subject would be $10 (0.0719 \times 70) = 50$ milligrams per hour. Using the formula $Q = R\beta$ or $Q/\beta = R$, the optimal loading dose for this example would be $50/0.159 = 315$ milligrams of theophylline. Since aminophylline contains about 80 milligrams theophylline per 100 milligrams aminophylline, an appropriate correction must be made when calculating the dose of aminophylline for loading and maintenance infusions.

Continuous improvement in physiologic responses to intravenously administered theophylline have been observed over the plasma range of theophylline concentration of 5 to 20 milligrams per liter. The improvement varies directly with the logarithm of the plasma concentration. However, there is a direct relationship between serum concentration, with toxicity frequent at serum concentrations greater than 25 micrograms per milliliter. Accordingly, it is recommended that serum drug concentrations be used to guide theo-

phylline administration and to confirm or exclude theophylline toxicity. A frequently used loading dose of aminophylline is 5.6 milligrams per kilogram given intravenously, and 0.9 milligram per kilogram per hour can be given as a maintenance dose. This amount will result in a plasma theophylline concentration of approximately 10 milligrams per liter for 95 percent of patients and in recovery from some 30 to 40 percent of reversible pulmonary-airway obstruction. The maintenance dose is most accurately given by a constant infusion pump, but a mini-drip set is adequate for clinical use if carefully adjusted. The maintenance dose infusion rate should be adjusted to maintain serum theophylline concentrations within optimal therapeutic limits, 10 micrograms per milliliter to 20 micrograms per milliliter. This can be determined by one of the rapid methods for the analysis of serum theophylline levels.

Relating toxicity to serum concentration has demonstrated the fact that bronchodilation from theophylline may be anticipated prior to toxic reactions. The most common expressions of theophylline toxicity are nausea, vomiting, abdominal cramps, diarrhea, arrhythmias, tremor, agitation, and convulsions.

In a series of patients on a multiple-dose schedule of oral aminophylline (200 to 300 milligrams every 6 hours) "trough" levels of serum theophylline ranged from 2.9 to 32.6 micrograms per milliliter. Levels usually remained in the same range for each individual. Kinetic studies demonstrated dependence of the mean serum level during multiple dosing on the intravenous half-life. Theophylline renal clearances are small and constant. Thus wide variations in metabolism appear to be chiefly responsible. Persistent nausea, vomiting, or anorexia were common with trough levels over 20 micrograms per milliliter but were not seen when trough levels were under 13 micrograms per milliliter. This suggests that these gastrointestinal side effects usually arise by some mechanism mediated through serum theophylline levels rather than from direct irritation of the gastric mucosa. Although aminophylline overdosage is a well-recognized cause of nausea and vomiting, most clinicians assume these symptoms to be caused by direct irritation of the gastric mucosa. Probably of greater importance are perfusion factors, such as mucosal tissue concentrations, effects on gastric acid secretion, or stimulation of central vomiting centers.

Intolerance to aminophylline should be managed by dose reduction rather than stopping the drug entirely. Many causes of "intolerance" disappear with a small reduction in dose.

It has frequently been assumed that gastrointestinal symptoms will invariably precede more serious signs of toxicity. The current data do not support this assumption because prior adverse effects are frequently not recognized in many patients who experience seizures associated with intravenous theophylline therapy. In one such study, serum theophylline concentrations obtained within one hour of the seizure ranged from 25 micrograms per milliliter to 70 micrograms per milliliter, with a mean value (53 ± 4.8 micrograms per milliliter) more than twice the upper limit of the recommended therapeutic concentration. This serum theophylline concentration was greater than the concentration found in a group of patients with less severe drug-related symptoms. Factors predisposing to the high serum concentrations in the patients with seizures were both higher drug dosage compared with the other group, and hepatic dysfunction, which was more common in both groups with drug-related symptoms. In the past, only the less serious and more common adverse effects of anorexia, nausea, and vomiting have been shown to relate to serum theophylline concentrations. Theophylline toxicity may be diagnosed with a high level of confidence only from the finding of a high serum theophylline concentration.

Theophylline when used by mouth for maintenance therapy for the treatment of chronic bronchospasm or intravenously for the treatment of acute persistent bronchospasm is probably the most effective and safe single drug available to the clinician. This is particularly true when theophylline is given in adequate doses to maintain optimum serum levels.

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CHRONIC GRANULOCYTIC LEUKEMIA

JOHN M. FLEXNER, M.D.*

Chronic granulocytic leukemia (CGL) is a malignant process that we have learned to identify and to better understand its kinetics and pathophysiology, yet we have done only a little therapeutically in altering its natural history. Today's discussion will review the clinical manifestations, diagnosis, prognosis and current therapy of CGL.

Clinical Findings and Diagnosis

An outline of the more common symptoms and signs are presented in Table 1. These symptoms and physical findings are taken from a review of 106 patients compiled by Marsh at the University of Utah.¹ Note the rather vague symptoms of fatigue, weight loss, abdominal pain, and fullness (the latter due to splenic enlargement) are the most common clinical presentations. Splenomegaly and sternal tenderness are the most common physical findings. The peripheral blood findings are depicted in Table 2. Leukocytosis with a median count of 160,000 per cmm was noted by Marsh with a range of 27,000 to 1,000,000 per cmm. Note that the percentage of myeloblasts was less than 5 percent with a range of 0-12 percent. Likewise the promyelocytes were within similar limits. This finding is

TABLE 1*
SYMPTOMS AND SIGNS IN CGL

Symptoms at Presentation	Approximate % of Patients
Fatigue	85
Weight loss	60
Abdominal fullness	40
Easy bruising or bleeding	35
Abdominal pain	35
Signs	
Splenomegaly	95
Hepatomegaly	50
Sternal tenderness	80
Purpura	30
Retinal hemorrhage	20
Fever	10
Palpable lymph nodes	65
Palpable lymph nodes (larger than 1 cm in diameter)	10

*As modified from (1)

*Associate Professor of Medicine

TABLE 2*
THE PERIPHERAL BLOOD IN CGL

Leukocytes	
Total count, median	160,000 mm ³
range	27,000 - >1,000,000
% Myeloblasts, median	2%
range	0-12%
% Promyelocytes, median	5%
range	0-20%
Red cells	
% of patients anemic	85%
Moderate anemia	40%
Severe anemia	5%
Nucleated red cells	65%
Reticulocytes >3%	50%
Platelets	
Less than 150,000 mm ³	10%
150,000-450,000 mm ³	30%
Greater than 450,000 mm ³	60%

*As modified from (1)

important in differentiating chronic granulocytic leukemia from the blastic phase or acute transitional phase of this illness. Anemia is found in approximately 80 percent of the patients but seldom of a severe degree. Nucleated red cells are commonly found with a varied degree of reticulocytosis. Thrombocytosis is found in almost 60 percent of the cases and thrombocytopenia is uncommon. Bone marrow examination usually shows hypercellularity of the more mature granulocytic cells and megakaryocytes.

Chronic granulocytic leukemia has two ancillary laboratory findings that help in distinguishing this malignant process from a so-called leukemoid reaction. One is a low level or absence of leukocyte alkaline phosphatase (LAP) in the more mature granulocytic cells. Special staining techniques identify the presence of this enzyme in the more mature granulocytic cells. A normal or "high" control is run concomitantly. A low score is suggestive evidence for CGL. A normal or high score does not necessarily rule out the diagnosis but makes it less likely. A rising score late in the illness may be a harbinger of blastic transformation. There is suggestive evidence that this enzyme is chemically different in CGL than in normal cells.²

The Philadelphia chromosome (Ph¹), an acquired marker, has been found in from 70 to 90 percent of patients with CGL.³ This abnormal chromosome was first discovered in 1960 by

Nowell and Hungerford and initially thought to belong to the G group number 21.⁴ We now know that it is a number 22 small achrocentric G group with a portion of its long arms translocated to chromosome number 9.⁵ This marker chromosome is found not only in neutrophilic granulocytic cells, but also in eosinophiles, normoblasts, and probably in megakaryocytes.⁶ It does not exist in lymphocytic elements. The presence of Ph¹ chromosome does not necessarily correlate with low LAP scores. Low levels of LAP have been found in Ph¹ negative CGL patients and conversely normal levels in Ph¹ positive patients.³ It is of interest to note that when one identical twin develops CGL, the unaffected twin does not demonstrate this marker chromosome.⁷ Indeed these observations are suggestive that CGL is a clonal disease that originates from a single, abnormal stem cell that proliferates preferentially over normal stem cells. The Ph¹ marker rarely disappears during treatment of CGL.

CGL is classified as Ph¹ positive or negative. This is an important distinction to make because those with Ph¹ positively seem to have a better prognosis. CGL also has been classified according to its morphologic variations—that is eosinophilic, basophilic, and rarely monocytic or neutrophilic. The latter diseases act like typical CGL for the most part. There is one sub set of patients who lack the Y chromosomes and tend to have a particularly good prognosis, though the hematologic and clinical manifestations are identical to 46 XY Ph¹ CGL.⁸

When patients present with leukocytosis and granulocytosis, one must rule out CGL. The presence of the common clinical manifestations of CGL: splenomegaly and sternal tenderness, and the laboratory findings of basophilia, eosinophilia, and thrombocytosis, all favor CGL. In addition, patients with severe degrees of leukocytosis (leukemoid reactions) are often very toxic, ill or debilitated from the ravages of infection, granulomata, or disseminated malignancy. Patients with CGL may be relatively well, considering the degree of elevation of their white blood count. CGL must be differentiated from the other myeloproliferative disorders, especially polycythemia vera and agnogenic myeloid metaplasia. Bone marrow examination is most helpful. Classically, in polycythemia vera one finds "trilineage hyperplasia," defined as hypercellularity with proliferation of all marrow elements—megakaryocytic,

normoblastic, and granulocytic. Polycythemia vera will have more erythroid elements than CGL, which will show a preponderance of granulocytic cells. Myeloid metaplasia usually has less than 50,000 WBC per cmm in the peripheral blood and the marrow aspiration is markedly hypocellular with characteristic fibrotic changes seen on marrow biopsy. As in a leukemoid reaction, the LAP score is usually high and the Ph¹ chromosome is absent.

Prognosis

The prognosis of patients with CGL has changed little in the last 30 to 40 years. In spite of the advent of several chemotherapeutic agents, no major change has occurred in the inexorable course of this malignancy. One merely has to examine the results of Dr. George Minot and his co-workers⁹ who achieved results with Orthovoltage radiotherapy and arsenicals (Fowler's paste) similar to those presently attained with our newer agents. The median survival of approximately three years is still with us today—roughly 50 percent are alive at three years. There is a decidedly shortened survival in patients who are Ph¹ negative (median 1 year), the reasons for which are unknown. The survival statistics today are quite similar to those attained by Minot in the 1920's to 30's. Thus far it has not been shown that therapy appreciably increases the survival time.

The primary cause of death in CGL is so-called blast crisis or blastic transformation. Approximately 60 percent of patients with CGL terminate in this fashion, and as shown by Karanas, when other causes unrelated to leukemia are excluded, the numbers are actually closer to 80 percent.¹⁰ The manifestations of blastic transformation are outlined in Table 3 as summarized by Canellos, et al.¹¹ Note that the sine qua non is an increase in number of myeloblasts in the marrow and peripheral blood. With this increase, there is a concomitant reduction in the number of erythroid elements as well as megakaryocytes. The result of this transition is essentially acute leukemia with its inevitable fever, bleeding, splenomegaly, and bone pain.

Blastic transformation usually is granulocytic, the prevalent cells being myeloblasts, although recently it has been shown that a small number of cases may undergo monoblastic or lymphoblastic transformation.¹² This will now be further discussed by Dr. Glick.

Blastic crisis is the terminal event in approximately 80 percent of patients with CGL. The diagnosis is usually made by finding increasingly immature cells in the blood and bone marrow along with additional features as outlined in Table 3. The bone marrow histology is often indistinguishable from that of acute leukemia with solid growth of blastic cells. It is now known that these immature cells may not only be myeloblasts, but may show the same spectrum of cell types observed in acute leukemia, including promonocytes, proerythroblasts, or immature megakaryocytes. These findings imply that the defective cell is probably a pluripotential myeloid stem cell with the ability to give rise to many cell types.

TABLE 3***FEATURES OF BLASTIC TRANSFORMATION OF CGL****Principal features:**

- 1) Increasing leukocytosis with decrease in mature granulocytes, decreasing platelet count, anemia unresponsive to chronic phase therapy.
- 2) Increasing % of blasts in the marrow (20-30%)

Other:

- 1) Progressive splenomegaly
- 2) Extramedullary tumors
- 3) Bone pain
- 4) Rising LAP
- 5) Aneuploidy
- 6) Chills, fever

*As modified from (11)

Therapy for blastic crisis with agents similar to those used in acute leukemia is inferior in inducing remission. However, the recognition of a type of blastic conversion indistinguishable from acute lymphoblastic leukemia (ALL), treated with Vincristine or Prednisone, may give higher remission rates.¹³ The cells in this type of blastic crisis have been found to have the Ph¹ chromosome, to contain the enzyme terminal transferase which is found in most ALL cells, and to be ultrastructurally identical to those cells in ALL (Figure 1). These findings not only indicate the possibility of occasional lymphoblastic conversion of CGL, but raise the question of a stem cell pluripotent for lymphoid as well as myeloid cells.

DR. FLEXNER: In addition to blastic transformation there are several factors influencing the prognosis of patients with CGL.¹⁴ These are annotated in Table 4. Fever, lymphadenopathy,

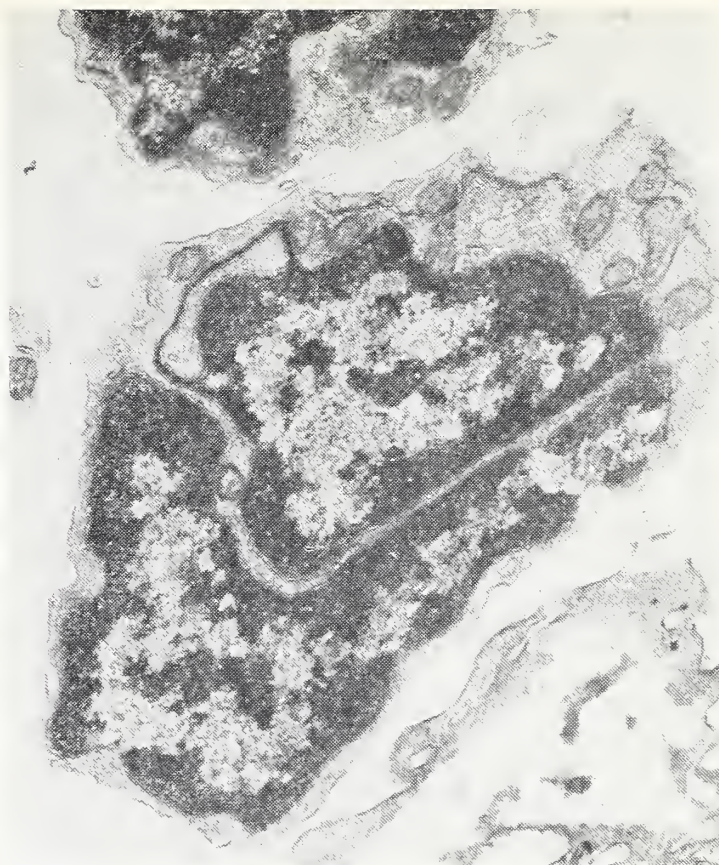


Fig. 1. Electron micrograph of a blast cell from a patient with blastic crisis, showing characteristics (nuclear folding and pocket) indistinguishable from Acute Lymphoblastic Leukemia cell. x-15,500.

dermatitis, absence of Ph¹ chromosome, presence of muramidase in serum and urine, myelofibrosis, and basophilia are bad prognostic signs at the onset of the disease. A rising LAP, multiple Ph¹ chromosomes (usually doubling), aneuploidy, and myelofibrosis are seen later in the course of the illness.

Therapy

The alkylating agent, Busulfan, is currently the therapy of choice for CGL. Splenic irradiation remained the treatment of choice until the development of Busulfan in the 1950's. Busulfan can be given orally with few initial side effects. In a controlled study, Witt¹⁵ demonstrated that

TABLE 4***POOR PROGNOSTIC FACTORS IN CGL**

Marked lymphadenopathy
Fever
Skin involvement
Fibrosis in bone marrow
Absence of Ph¹ chromosome
Muramidasuria
Rising LAP score
Increasing Basophilia
Multiple Ph¹ chromosomes
Aneuploidy or other chromosomal abnormalities
Development of myelofibrosis

*Assistant Professor of Pathology

indeed Busulfan may well be superior to splenic irradiation alone in CGL. In addition there is suggestive evidence that radiotherapy may even hasten blastic transformation.¹⁶ Busulfan also appears to be superior to the other oral alkylating agents. There is a controversy regarding the time at which therapy should be discontinued or attenuated. There is no clinical evidence to support that a patient is better at a 10,000 than a 50,000 white count. Most patients will remain asymptomatic once the count is lowered below the 100-150,000 level. The advantages of keeping the counts suppressed is to avoid leukostasis (leukocyte thrombi) and hepatosplenomegaly. In addition, anemia and thrombocytopenia, which may be present at the onset, will usually be corrected by lowering the white count. Decrease in splenic size may be the most dramatic aspect of therapy. The usual dose of Busulfan is 4 to 6 mgs a day at the onset of the illness, tapering to 2 mgs a day to every other day as the white count drops below 20-30,000. Resistance to Busulfan is quite unusual, but when it occurs other alkylating agents, antipurine drugs, or hydroxyurea may be tried. Splenic irradiation is usually reserved for patients with massive splenomegaly or when one wishes to lower the white count rapidly. The latter is best done by leukopheresis with a continuous flow centrifuge. The indication for leukopheresis is leukostasis—"white cell thromboses" and bleeding problems related directly to the mass of white cells.

The treatment of blastic crises has met with little success. Canellos and the Group at the National Cancer Institute treated patients with Vincristine and Prednisone and found those who were hypodiploid seem to respond more favorably.¹¹ The Group at the M.D. Anderson Hospital tried a variety of combination chemotherapeutic regimens and achieved an overall remission rate of 28 percent.¹⁷ This was in agreement with Canellos' series where he was able to achieve approximately a 30 percent remission rate. Spiers and his co-workers at the Hammersmith Hospital treated nine patients with a very aggressive protocol entailing some seven to eight chemotherapeutic agents.¹⁸ Four of these patients demonstrated a favorable response with survival up to 14 months in one of the cases. The authors state that even with such aggressive therapy "toxicity was not extreme." The consensus of most centers dealing with blastic crises is that intensive therapy thus far has done little to alter

this phase of the illness. Most physicians dealing with the blastic crises try merely to suppress the white blood count with standard agents such as combinations of Cytosine Arabinoside and Thio-guanine or 6-mercaptopurine. The usage of Vincristine and Prednisone, a heretofore rather "benign" combination for treating blastic crises, has been found by Stein and Roth in their small series to produce severe myelotoxicity and fatal granulocytopenia in two out of eight patients treated.¹⁹

There is recent evidence to suggest that blastic transformation may arise in extramedullary sites, especially the spleen,²⁰⁻²¹ in some patients. It is of interest that in these patients the marrow karyotype remains that of chronic leukemia, i.e. 46 Ph¹ positive, while the spleen reveals aneuploidy with an extra Ph¹ chromosome. These authors feel splenectomy has a role in these particular patients, and there is one patient reported²¹ suggesting this possibility. However, it has never been shown that routine splenectomy delays the onset of the blastic phase of CGL.

Summary

Chronic granulocytic leukemia is one of the myeloproliferative disorders characterized by leukocytosis, thrombocytosis, mild anemia, and a bone marrow which is hypercellular due to an increase in granulocytic elements. Patients usually have vague symptoms referable to an enlarged spleen. The leukocyte alkaline phosphatase content of mature granulocytic elements is low. There is a marker chromosome of the G group, number 22 with transposition of portions of the long arms to chromosomes in group number 9. Median survival is approximately three years in spite of newer chemotherapeutic agents. Therapy does not prolong survival nor prevent blastic transformation. However, Busulfan can control the white count, make the patient more comfortable by reducing spleen size, and prevent leukostasis. Busulfan seems preferable to the many other therapeutic modalities, including radiotherapy. Blastic transformation is the usual terminal event, with infection and hemorrhage. Modern day therapy has added little to the treatment of this transitional form of CGL. Occasionally patients have a lymphoblastic transformation, a state more responsive to therapy. Blastic transformation rarely may arise in extramedullary sites, such as the spleen, yet splenectomy has not been of proven value in prolonging

the chronic phase of the disease except in selected cases.

Editor's note: This conference is the first of a regular series to be published in the Journal of the Tennessee Medical Association.

F. Anthony Greco, M.D., Editor

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* * *

Doctor Fee Increases

Several times recently I have seen the statement, "Doctors' fees have increased twice as fast as the cost of living." Adam Smith of New York magazine, no less, says just that in the January 17 issue.

To get the statistical record straight, here is the Consumer Price Index:

	All Items	All Services	MD Fees	Total Medical Care
1967	100.0	100.0	100.0	100.0
1970	116.3	121.6	121.4	120.6
1976	172.6	183.2	192.2	187.9

(Sept.)

(Source: Social Security Bulletin)

In the same period, incidentally, the maximum social security tax went from \$290.40 per year to (1976) \$895.05, and to \$965.25 in 1977.

Frank D. Campion
AMA Director of Public Relations

TMA cat scan of the month

The patient for presentation is a 78-year-old white woman with decreased vision and proptosis in the right eye.

Please examine figures 1 and 2 and choose the most accurate diagnosis.

1. Temporal lobe glioma
2. Optic glioma
3. Carcinoma of the orbit
4. Retrobulbar inflammation

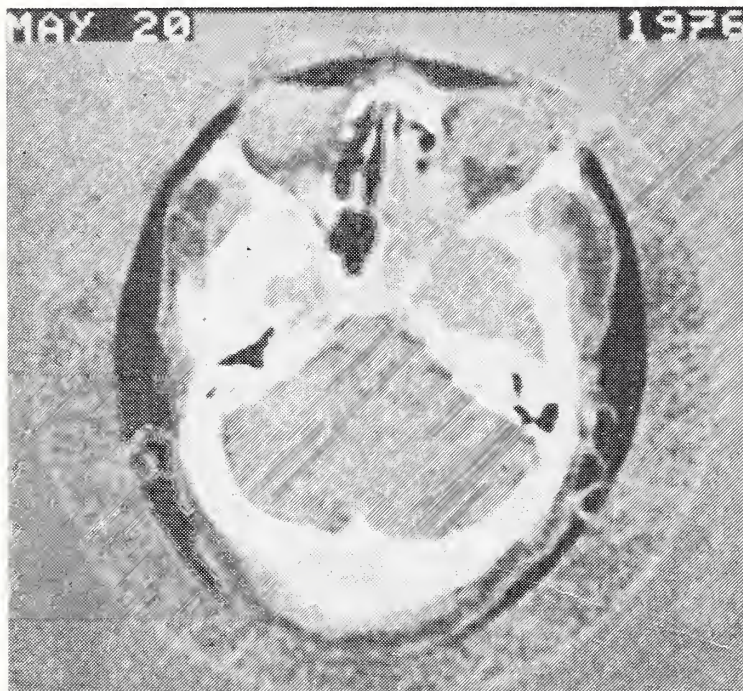


FIG. 1

Discussion

A soft tissue mass can be seen adjacent to the medial wall of the right orbit. Note that the medial wall of the orbit (bony) has been destroyed and that the grayish soft tissue mass representing the tumor has extended posteriorly to destroy the wall of the sphenoid sinus, and laterally and anteriorly to destroy the bony partitions that had formed the ethmoid sinuses. Biopsy of the mass returned the diagnosis of undifferentiated carcinoma.

The diagnosis of optic glioma may be ex-

From the Baptist Memorial Hospital, Memphis, Tenn. 38146.

cluded because the optic nerve is visible on both cuts and is not greatly enlarged or irregular; one would not expect either an optic or temporal lobe glioma or retrobulbar inflammation to destroy bone such as is the case here.

The exact origin of this undifferentiated carcinoma was never established. Possibilities include metastatic tumor, and primary tumor of the paranasal sinuses invading the orbit.

Primary tumors involving the orbit include lymphoma, plasmacytoma, lymphangioma, hemangioma and rhabdomyosarcoma. Secondary tumors include metastatic carcinoma and, in children, metastatic neuroblastoma.

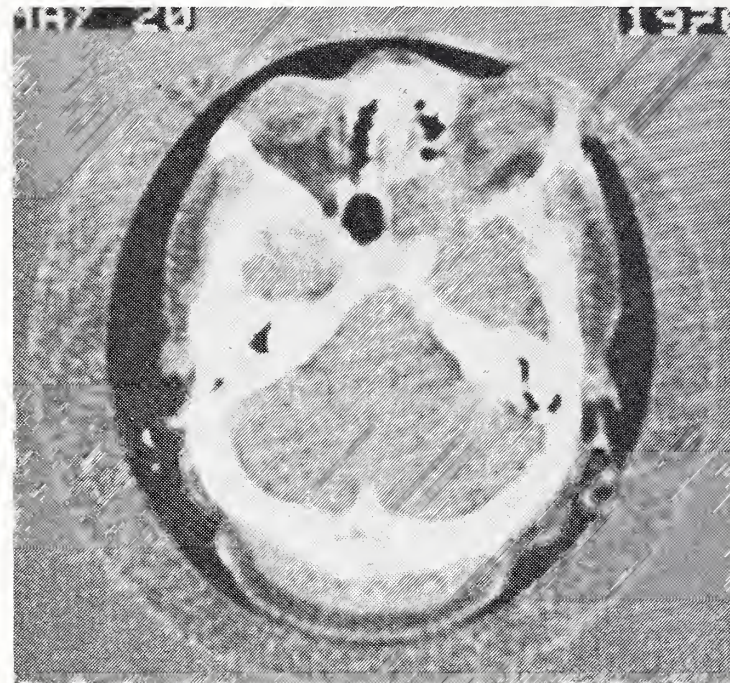


FIG. 2

As a primary diagnostic modality, C A T scanning offers an excellent means for evaluating orbital tumors. As was the case with the patient presented here, the extent of spread of these tumors can be quite accurately assessed. C A T scans may also serve to follow further invasion or regression of these tumors following surgery or radiation therapy.

ANSWER: *Carcinoma of the orbit*

Stephen L. Gammill, M.D.

Reference

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TMA EKG of the month

A 76-year-old man with a history of previous myocardial infarction was seen in Saint Thomas Hospital in January, 1977 for evaluation of syncopal episodes. During a prior hospitalization elsewhere he was noted to have third degree heart block.

Physical examination revealed a blood pressure of 138/70. The second heart sound was widely split and fixed with an increased pulmonic closure component. An S₃ gallop was audible over the apex. No murmurs were present. The arterial pulses were of normal contour and amplitude except in the feet where they were not palpable. There were no carotid bruit.

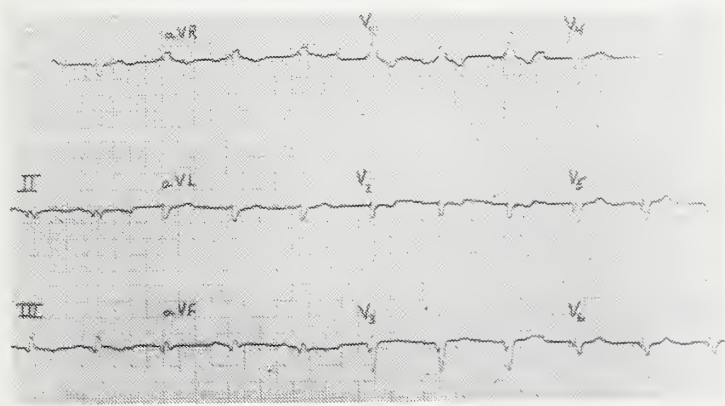


FIG. 1

An echocardiogram was carried out which showed the left ventricular end diastolic diameter to be 7 cm. (upper limits of normal 5.6 cm). There was poor contractility of the heart with very poor motion of the posterior wall. The right ventricular chamber was dilated. Chest film disclosed a diffuse interstitial infiltrate. Cardiac catheterization carried out on Feb. 2, 1977 showed marked impairment of left ventricular contractility with apical and inferior akinesis. The left ventricular end diastolic pressures were increased at 40 mm. Hg. Ejection fraction was markedly impaired at 15%. Mean pulmonary artery pressures were increased at 40 mm. Hg. The cardiac index was 2.2 liter/min/m². There was severe stenosis involving the anterior descending coronary artery, diagonal coronary artery, circumflex coronary artery and proximal right coronary artery. The following electrocardiogram was obtained. (Fig. 1)

From the Department of Cardiology, Saint Thomas Hospital, Nashville, Tenn. 37205.

The tracing shows normal sinus rhythm with a rate of 70 per min. The PR interval is at upper limits of normal at 0.20 sec. There is a small initial R wave in standard lead 1 followed by a prominent S wave. A QS wave is present in standard lead 2 with a QR in 3 and AVF. These superiorly directed forces (producing the Q waves in 2, 3, and AVF) are diagnostic of a previous inferior wall infarction. Q waves are also present in leads V₃ through V₆. These Q waves document infarction also involving the lateral wall of the heart. The QRS duration is prolonged at 0.12 sec. The late QRS forces are rightward (resulting in a prominent S wave in standard lead 1). They are also anterior (resulting in a prominent R in V₁). The combination of QRS prolongation with the late QRS forces rightward and anterior is diagnostic of right bundle branch block. Right bundle branch block does not affect the initial 0.04-0.05 second QRS forces and infarction therefore may be reliably read in the presence of right bundle branch block.

Close scrutiny of this EKG shows that the QRS forces rotate rightward very early—(approximately 30 msec). The initial forces are also anterior (no notable Q wave in V₁). This is not usually caused by right bundle branch block. Posterior hemiblock may cause rightward rotation of the unblocked QRS forces. This cannot be read in the presence of inferior infarction however. Right ventricular enlargement may cause unblocked forces to be rightward and anterior and may be the best explanation for the observation in this patient. A strictly posterior infarction causing the early R waves in V₁ cannot be excluded but is not supported by the lack of R waves in V₂. This patient had a permanent sequential atrio-ventricular pacemaker implanted and has had no subsequent syncopal episode.

- Final Diagnosis: 1. Inferior lateral myocardial infarction of indeterminate age.
2. Right bundle branch block.

W. Barton Campbell, M.D.
Co-Director

MYOCARDIAL INFARCTION

The diagnosis of myocardial infarction rests on the history of chest pain, EKG changes, and serum enzyme elevation. Because the chest pain may be atypical or absent and the EKG changes non-specific, physicians have relied heavily on the serum enzyme levels. Serum CPK (creatinine phosphokinase), the best enzyme test in routine use, lacks specificity and consequently false positive results are seen. The isozyme CPK-MB is quite specific and sensitive. However, it is an enzyme test and an electrophoretic test and requires two hours to perform. A serum myoglobin test is now available that purports to be easier to perform, a little more sensitive, and rises earlier than the CPK. This deserves further clinical trials.

Imaging approaches to myocardial infarct scanning includes the use of Technetium pyrophosphate and other technetium phosphate compounds. The principal problem with these agents is that: (1) Diffuse myocardial uptake has been reported in almost 20 percent of the patients who do not have myocardial infarction. (2) Subendocardial and non-transmural infarcts are often poorly visualized and result in a high false negative rate. (3) Technetium pyrophosphate uptake by myocardium may not correlate well with reduced blood flow.

N^{13} ammonia and C^{11} fatty acids may hold great promise as infarct localizing agents, but since the half-life of these isotopes is so short, proximity to a cyclotron is mandatory. Furthermore, position imaging with or without tomographic capability involves new expensive instrumentation which may not be available, leave alone an economically feasible alternative.

Scanning myocardial infarcts with antimyocardial myosin has recently been reported. The combination of nuclear imaging and sophisticated immunology using Fab 2 fractions of antimyocardial myosin seems most imaginative. The difficulties that I see with this approach is that: (1) It is not available for clinical testing at the present time. (2) It has not yet been tried in

humans, and (3), the best images are seen at 72 hours post injection. This delay between the time of injection and the time of ideal imaging could ultimately preclude antimyocardial myosin as an agent that is useful for heart scanning.

Recent publications by Leonard Holman and others involving mercury labelled polycyclic aromatic hydrocarbons (mercury hydroxy fluorescein) suggests that infarct avidity for these agents exceeds that of other known compounds. Clinical trials utilizing this agent and other similar agents (Sulfanothaleins and Phenolphthaleins) that have been tried in laboratory animals by Holman and his associates are eagerly awaited.

Finally, Thallium²⁰¹, an agent that is extracted by heart muscle in a fashion that is roughly analogous to potassium is currently enjoying popularity. Its principal advantage is the fact that ischemic but viable myocardium may be appreciated by showing normal uptake in the ischemic area while at rest, but diminished uptake in the same area after exercise. This should be most valuable in patients with angina, but without infarction. The principal limitations to Thallium scanning are: (1) It is very expensive (approximately one hundred dollars for the isotope for a single study); (2) The low energy limits resolution in a clinical setting so that subendothelial infarcts or small areas of infarction may be missed; (3) The long half-life of this isotope in myocardium makes repeated images over short periods of time very difficult.

The use of isotopes for testing various constituents in the serum that may be of help in the diagnosis of myocardial disease as well as the use of isotopes for imaging myocardial abnormalities is currently in a great state of ferment. Although it is difficult for most physicians in Nuclear Medicine to arrive at a rational approach to analysis of myocardial disease at the present time, the intensive effort by so many outstanding investigators will certainly result in new clinical modalities for diagnosing myocardial disease.

Robert L. Bell, M.D.

(References furnished on request.)

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, Tenn. 37203.

CLINICAL USE OF PROLACTIN ASSAYS

Prolactin, a polypeptide with a molecular weight near 21,000,¹ is synthesized in prolactin cells of the anterior pituitary gland. The dominant stimulus for release of prolactin requires depression of hypothalamic prolactin-inhibitor factor (PIF). Secretion of a hypothalamic prolactin-releasing factor (PRF) assumes a secondary role in prolactin release.^{2,3}

Prolactin is vital during pregnancy in preparation of the mammary gland for lactation and during lactation for synthesis and secretion of milk. During pregnancy estrogens and progesterone stimulate prolactin synthesis. The function of prolactin in males is less well defined, but together with testosterone may stimulate growth and function of the prostate.

Elevations in prolactin secretion are normal during pregnancy, lactation, breast stimulation, coitus, mental or physical stress, and in the newborn. Prolactin levels show a diurnal pattern, with a nocturnal rise.⁴ Hypersecretion of prolactin occurs with administration of various drugs, for example, certain tranquilizers (chlorpromazine, reserpine, meprobamate), amphetamines, alpha-methyldopa, theophylline, and thyrotropin-releasing hormone. Hyposecretion occurs with L-dopa and ergot drugs. Thus, in the management of patients with galactorrhea both L-dopa and bromergocryptine are used.

Hyperprolactinemia occurs in primary or secondary disorders involving the pituitary gland or the hypothalamus. About 50 percent of pituitary chromophobe adenomas including microadenomas secrete prolactin. Thus, hyperprolactinemia can provide a clue to the presence of this lesion long before the architecture of the sella turcica is altered. Additionally, Jacobs and Daughaday,³ have demonstrated elevated prolactin levels in about half their cases of hypopituitarism, hypothalamic disease, and acromegaly. Prolactin was also increased in all three cases of multiple endocrine adenomatosis.

Prolactin determinations are diagnostic adjuncts for various galactorrhea syndromes, eg.,

Forbes-Albright syndrome, Sheehan's disease and Chiari-Frommel syndrome. Galactorrhea patients without pituitary tumor have serum prolactin levels on the order of 20 times normal.⁵ With a pituitary adenoma serum prolactin may reach 150 times normal.

Interruption of the hypothalamic-pituitary axis is clinically validated by elevated serum prolactin. The lesion makes it impossible for prolactin-inhibitor factor to reach the pituitary and suppress prolactin production.

Completeness of a hypophysectomy can be diagnosed by administration of thyrotropin-releasing hormone to stimulate release of prolactin.⁶ The prolactin-secreting mechanism is extremely resistant to ablation, thus a positive prolactin response indicates incomplete hypophysectomy. Successful removal of prolactin-secreting tumors can be evaluated by serum prolactin assay.

Prolactin is determined in serum or plasma with a high degree of sensitivity, specificity, accuracy and reproducibility, made possible by using a radioimmunoassay system with selected characteristics for optimum performance. No specific preparation of the patient is required; however, the administration of isotopes will interfere with the assay. Administration of certain drugs, already listed, will metabolically alter prolactin levels. Since the secretion rate of prolactin varies, especially in patients with pituitary tumor, multiple specimens should be considered, either three or four from the same day or three or four at the same time each day, preferably not before 9 a.m.

E. George Linke, Ph.D.

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From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, Tenn. 37203.



Swine Flu Update

On December 16, 1976, the Advisory Committee on Immunization Practices and the Center for Disease Control called for a temporary halt to the National Influenza Immunization Program due to an apparent association between influenza vaccinations and Guillain-Barré Syndrome (GBS). This decision was brought about after evaluation of data obtained from a four state survey of neurologists and data obtained on each case of GBS they had diagnosed between September 1, 1976 and December 16, 1976.

In January of 1977, comprehensive investigation was done at the request of the Center for Disease Control in all states on each of the reported cases of GBS. As of this writing 49 states had reported 576 cases of GBS between October 1, 1976, (the beginning day of the Swine Flu Program) and January 10, 1977. There were 293 cases in influenza vaccine recipients, seven of whom received other influenza vaccines only and not the swine flu component.

There were 264 cases in non-vaccinated individuals. The vaccine status of 13 cases is unknown and six additional cases received vaccine after the onset of GBS symptoms. Twenty deaths were reported, ten among vaccinees and ten among the non-vaccinated. This gave an overall case fatality ratio of 3.4 percent.* From the initial study of the data there seemingly are no sexual differences. In the age group 20 to 50 vaccine recipients had a risk of developing GBS nine fold greater than unvaccinated persons.

In Tennessee thirty-six cases of GBS were reported for the entire survey period September 1, 1976, through February 1, 1977. Eleven individuals out of the thirty-six had been vaccinated with influenza vaccine prior to onset of symptoms. The eleven vaccinated all had received vaccine with the swine flu component; one had in addition received B/Hong Kong vaccine. Six of the cases were out-of-state residents diagnosed and reported by Tennessee physicians. To date there are no reported deaths among the thirty-six cases.

RESULTS OF TENNESSEE'S SWINE INFLUENZA VACCINATION PROGRAM AS OF DECEMBER 17, 1976

REGION	% of 18+ Age Group Vaccinated	% of 65+ Age Group Vaccinated	% of Total Doses Given in Health Department Clinics	% of Total Doses Given in Special Mass Clinics	% of Total Doses Given by Private Physicians
REGION 1—FIRST (8 Counties)	34%	45%	30%	46%	24%
REGION 2—EAST (16 Counties)	38%	40%	41%	50%	9%
REGION 3—SOUTHEAST (10 Counties)	27%	36%	59%	34%	7%
REGION 4—UPPER CUMBERLAND (14 Counties)	25%	34%	26%	44%	30%
REGION 5—MID-CUMBERLAND (13 Counties)	27%	43%	51%	39%	10%
REGION 6—SOUTH CENTRAL (13 Counties)	24%	32%	53%	40%	7%
REGION 7—NORTHWEST (9 Counties)	27%	37%	49%	38%	13%
REGION 8—SOUTHWEST (8 Counties)	34%	45%	59%	31%	10%
REGION 9—MEMPHIS-DELTA (4 Counties)	28%	44%	42%	44%	14%
STATE PERCENTAGES	32%	40%	45%	42%	13%

As of December 16, 1976, when the immunization moratorium began, Tennessee had given approximately 850,000 doses of Swine Influenza vaccine. Tennessee's delivery system vaccinated 40 percent of the state's population 65+ years of age and 32 percent of the state's 18+ population. The highest coverage in the state was in Anderson County which at the beginning of the moratorium had vaccinated 62 percent of its 18+ age group. (See attached chart for figures of the state's nine health regions). Of the 850,000 doses of Swine Flu vaccine given in Tennessee approximately 63 percent was monovalent (A/Swine) and 37 percent was bivalent (A/Swine and A/Victoria). Routine and special mass clinic programs carried on by the county health departments were responsible for 87 percent of the total swine vaccine doses administered (93 percent of the monovalent, and 79 percent of the bivalent). Private physicians accounted for 13 percent of the state's total doses (21 percent of the bivalent and 7 percent of the monovalent).

As you have no doubt heard by now, on Tuesday, February 8, the Secretary of Health, Education and Welfare announced that there would be a partial resumption of the National Influenza Immunization Program. There were three major elements to his announcement. First, that we should resume immunizing the high risk population (and at your discretion, others who request it) with Bivalent (A/Victoria and A/New Jersey) vaccine. Second, that immunizing the population with Monovalent B/Hong Kong influenza vaccine should be resumed. This, of course, is important to you since private physicians have been the only providers of this vaccine. Third, that we should continue the moratorium on the use of the Monovalent Swine (A/New Jersey/76) vaccine. In Tennessee we are following these recommendations in their entirety.

Another feature of his announcement was that a new consent form has been developed for use when providing the vaccine. That form includes information on the possible association of influenza vaccine and the development of Guillain-Barré Syndrome. If you are using the consent form in your practice, this new form is the only one that should be used. All of the old forms should be destroyed. The new forms are available in small quantities from your local health department.

The coverage provided under the liability law passed by Congress is in effect for program participants who use the new consent form and make no charge for the vaccine or its administration. All other aspects of the program remain as they were.

*Center for Disease Control Morbidity and Mortality Report dated January 14, 1977/Vol. 26/No. 1.

* * *

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The Birth Defects Evaluation Center*

The Birth Defects Evaluation Center (BDEC) is a specialized clinic that provides diagnostic evaluation services, genetic counseling, individual and group counseling and Child Health and Development Services to patients from East Tennessee. The Center's staff assesses the patients' strengths and weaknesses, identifies the extent and nature of the handicap or developmental problem, counsels the parents, guardians or close relatives and makes referrals and recommendations for training, treatment, and follow-up.

Through the interest and support of East Tennessee's physicians and the volunteers of the National Foundation March of Dimes, the Center opened in January, 1966. Chromosomal analyses, medical evaluations and genetic counseling were the initial services offered. A community staffing grant awarded by the Tennessee State Department of Mental Health and Mental Retardation in 1970 made possible additional services. A team approach was initiated in 1972 when federal funds from Title IVa were obtained through a contract with the Tennessee Department of Human Services (formerly DPW). Medical, psychological and speech evaluations, genetic counseling, and part of the social services were continued with funds from the Tennessee State Department of Mental Health and Mental Retardation and the National Foundation March of Dimes. In August, 1974, social services were expanded for clients eligible for Title IVa and VI of the Social Security Act and these services were continued and expanded in October, 1975, under Title XX.

In November, 1975, a Title XX program for comprehensive Child Health and Development Services was begun. The purpose of this program is to help prevent mental retardation in infants and children under age seven who are at risk of becoming mentally retarded as a result of genetic, social, prenatal, neonatal, or postnatal factors. It is also aimed at helping mentally or physically handicapped children reach their maximum potential. The program includes

screening and developmental tests, family counseling, educational activities with the parents to promote development in their children, psychological evaluations, medical examinations, and other diagnostic services.

The Center is currently supported by grants from the Tennessee State Department of Mental Health and Mental Retardation, the Tennessee Department of Human Services, and the National Foundation March of Dimes. Fees on a sliding scale are charged to those who can pay. However, no one is denied services because of inability to pay. The Center serves 34 counties in East Tennessee. Referrals are received from physicians, other professionals and agencies.

The Center is located in the Clinical Education Building at the University of Tennessee Center of Health Sciences, Memorial Research Center and Hospital, 1924 Alcoa Highway, Knoxville. Carmen B. Lozzio, M.D., a research professor, geneticist and associate professor of pediatrics, has been the Director since 1966. Other staff members include one pediatrician (M.D.), one genetic associate (M.D.), one psychologist (Ed.D.), one psychological examiner (M.S.), one speech pathologist (M.A.), seven social workers (M.S.), one nutritionist (Ph.D.), one health educator (R.N.), one nurse (R.N.), one cytogeneticist (M.S.), two cytotechnologists (M.S.), one cytotechnologist (B.S.), one cytogenetic fellow (Ph.D.), one laboratory technician and four secretaries.

BDEC is the only genetic counseling unit in East Tennessee and is one of a limited number of comprehensive medical genetic services in the USA. In addition to clinical genetics, cytogenetics, metabolic studies, and prenatal diagnosis for chromosomal, metabolic and neurotubal disorders, the program includes psychological and social services aimed at helping families deal with the emotional and social stresses that often occur when individuals are informed of a significantly increased genetic risk. Chromosomal analyses using the new Giemsa banding techniques and fluorescent Q bands are performed on patients with mental retardation and multiple congenital anomalies, clinical syndromes associated with chromosomal aberrations, parents who

*At University of Tennessee Memorial Research Center and Hospital, Knoxville Center for the Health Sciences.

have lost children with multiple congenital defects or who have had multiple miscarriages and individuals exposed to agents which increase chromosome breakage. Prenatal diagnosis is offered to women 40 years old or older, to mothers of a child with a chromosomal disorder such as Down's Syndrome or with neural tube malformations (open spine, meningomyelocele or anencephaly) and to mothers of children with specific types of metabolic disorders. The procedure is also available to women 35-40 years of age and to women who are carriers of X-linked disorders. The amniocentesis is scheduled at 16 gestational weeks. Following an ultrasound study, the amniotic fluid is obtained by an obstetrician on an outpatient basis. The amniotic cells are cultured at the BDEC laboratories and fluid is sent to another laboratory for alpha-fetoprotein studies.

Diagnostic and counseling services are provided at the Center in Knoxville and at several

outreach clinics recently organized to better serve patients living outside the metropolitan area. These clinics are held twice a month at local public health departments or community buildings in Blount, Campbell, Cocke, Hamblen, Loudon, McMinn, Roane, and Sevier Counties. Psychological, speech, nutritional, educational and social services are provided at these outreach clinics. Medical evaluations, specialized laboratory tests and genetic counseling are scheduled at the Center in Knoxville. Social services, nutritional counseling, health education and parent training services are provided in the patients' homes. All appointments are arranged through the main office.

Our BDEC program has grown significantly during the past seven years. Plans for future expansion will be based on the needs of the community and the support of the program by physicians and other professionals and agencies in East Tennessee.

* * *

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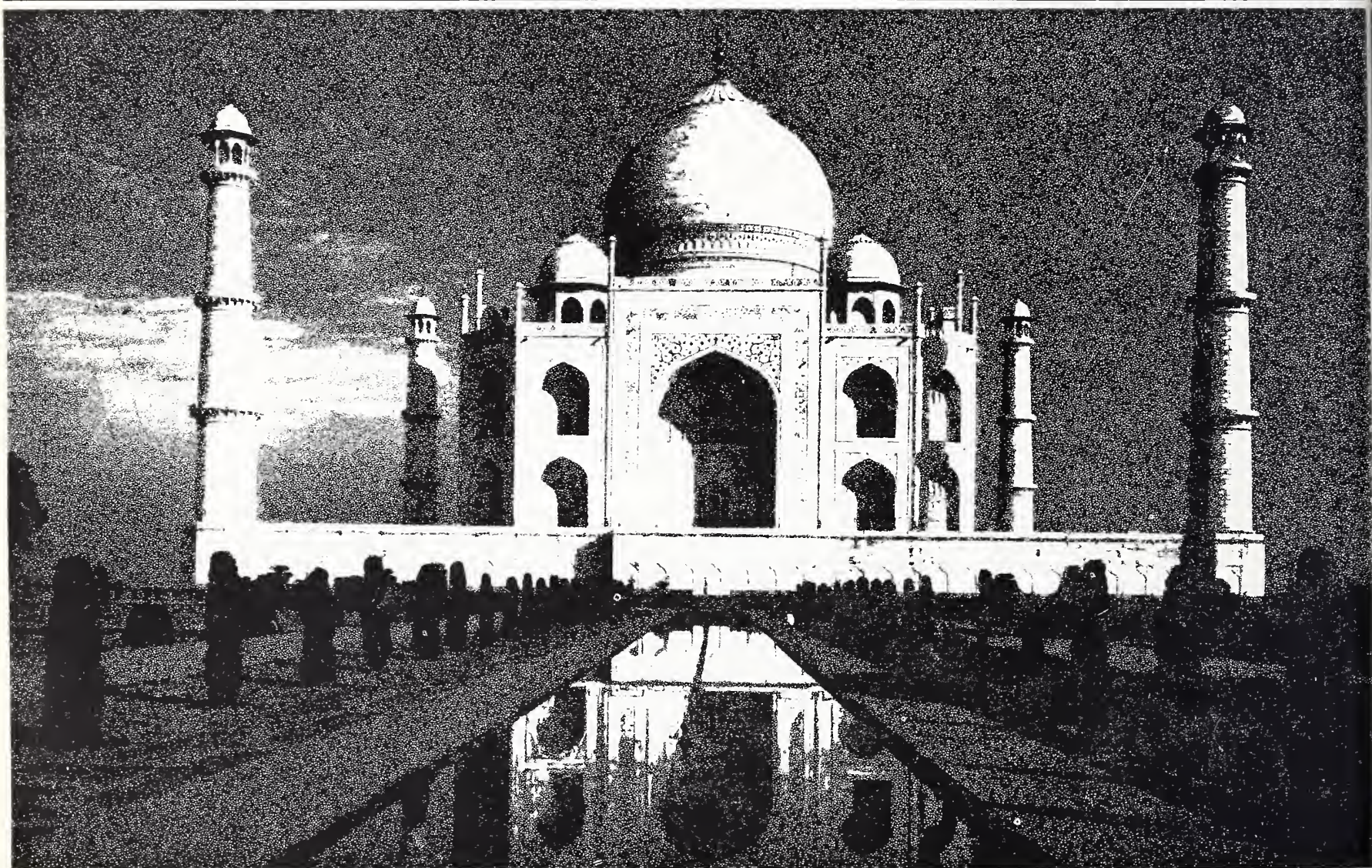
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C. GORDON PEERMAN, JR.

A Message From the British

During the fifth AMA National Leadership Conference the last of January in Chicago, three Englishmen from High Wycomb in Buckinghamshire, discussed the National Health Service in Britain. Each had a special message which may be interesting to you.

The district administrator, Mr. Robin Anson-Owen, a layman, observed that, "Your new administration can surely see that the greater good, both for the patient, the profession and the government itself will come from leaving the profession free from restraint, that the future lies in the encouragement of the American tradition of free enterprise, self-reliance and self-responsibility." He advised opposition to the elimination of the insurance mechanism, the contracting of physicians to government, and especially having our physicians in the employ of government.

A general practitioner, J. McLuskie, M.D., who is a member of a district management team which provides primary care, expressed strong feelings about the oppressive and inefficient bureaucracy of the National Health Service. His opinion was, "Keep it out of large bureaucratic departments. Keep your independent status, and make the patient make some contribution at the time of demand."

The third address was by Mr. Peter H. Lord, a consultant surgeon who is hospital based. He also warned about the dangers of a stagnating bureaucracy and the pitfalls of a "Master Plan" which may not meet the local need. He also warns about standardization which can reduce choice and limit experience. It is his opinion that preventive medicine may be expensive and still leave sick patients to be treated. Also it is necessary to preserve the mobility of doctors from one institution to another and the independence of these institutions.

Mr. Lord advises, "Accept that it is the profession's responsibility to find solutions to our problems, otherwise the politicians step in as they have done in the United Kingdom, and it is quite amazing how little they understand the true nature of the problems we would all like to see solved."

In listening to the testimony of these men, it is clear that the National Health Service was started with good intentions. The results certainly have not met those early expectations that every person, of any description, obtain the best treatment this country can afford, entirely free at the moment of demand. The speakers identified certain pitfalls which they have observed in thirty years of experience with the National Health Service.

A thoughtful evaluation of the National Health Insurance Bill developed over the years by the AMA reveals a concerted effort to avoid these objections by the British of their own Health Service. Although some physicians in the United States still oppose any health legislation, it appears that the medical profession is trying to meet its public responsibility by proposing legislation that will be helpful in solving many of our problems.

Sincerely,

C. Gordon Peerman, Jr., M.D.

PRESIDENT

**president's
page**

Journal

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ADDISON B. SCOVILLE, JR., M.D., ASSOCIATE EDITOR

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MARCH, 1977

editorials

Roots

Last month I became a member of a very exclusive group numbering a mere 120 million. We are those who watched at least a part of *Roots*, television's *opus magnum* to date. The story of its writing is almost as impressive as the story of *Roots* itself. Though after the first two episodes I saw only scattered fragments, I got the impression that for the most part television came away with a creditable depiction of one of our nation's great tragedies and in general resisted the temptation to make soap opera of it, though I did note one critic leveled this charge.

I have a quarrel with the producers about an

impression left me by the first episode. It is in itself so inconsequential for the purposes of the film, even allowing it is not true to the book, I would not mention it if the other consequences were not so important. I do not wish to make a comparison, for there is nothing to be said in behalf of slave traders. But the depiction of the black Africans as uniformly noble simply does not square with the facts. As a group, nation, or race, black Africans were—and are—neither more nor less noble than any other group, nation, or race. We share a common humanity, and though the balance may vary, any group, if large enough, encompasses individuals from the most noble to the most depraved.

Slavery has been practiced by human beings since Adam's fall. Except for a few enlightened individuals, it has always been assumed as a matter of course that the weaker would serve the stronger. The Africans themselves engaged in slave trade long before the coming of the white man, European or Moslem. And in case any of you believe involuntary servitude ended in 1864 with the signing of the Emancipation Proclamation, I have news for you. Human nature being what it is, the stronger will always exert power over the weaker, and any legislation strong enough to prevent it will simply make bureaucracy the slave-driver.

Nor is bondage to other human beings our only, or even necessarily our worst, form of slavery. We are slaves to whatever controls us—alcohol, drugs, tobacco, lust, self-hate, or spirits, for example. There are those who are slaves even to their own conception of freedom—license—causing them to violate the rights and property of others. It was possible by legislation to end the legal ownership of a black American by a white American. But if *Roots* showed nothing else, it showed the white master as often and as truly enslaved as his black servant. The answer to slavery is not within man.

Marc Connelley's classic film *The Green Pastures* is the story of the Bible as seen through the eyes of a black preacher and told to the children of his flock. It often comes as a shock to white viewers to see God portrayed as black. Yet what could be more natural, if we believe that man was made in the image of God? To be in the image of God means to be a spiritual being, able to have fellowship with Him. If any of us were to anthropomorphize God, in order to

relate to him in any intimate way he would need to resemble us.

Yet when God did take on human flesh, He did it as a poor Jew named Jesus in a Hellenistic culture under Roman rule which took small account of the likes of Jews. It was at least as improbable a situation as being black in Virginia in 1870. We have no description of Jesus, either in Scripture or in the numerous secular accounts of His activities, though He could not have been the "pale Galilean" of Constantine, since He usually slept out of doors and walked the length of Palestine four times in His three year ministry. His one description, supposedly by a Roman procurator, has been judged to be spurious. God's Spirit makes Him real in the heart of the believer.

On "Good Friday" He met His death on a Roman cross. Those who later "turned the world upside down" (or rightside up, depending on your viewpoint) believed that was not the end, but that on "Easter Sunday" He defeated death and Hell by rising from the dead and ascending to the right hand of God the Father, "where He ever liveth and reigneth and maketh intercession for the saints." Their roots are in Him.

In ancient times slaves often enjoyed special privileges, and were sometimes given their freedom in return for long and faithful service. Not infrequently they chose to remain as slaves, and were then known as "bondslaves" or "bondservants," to indicate their voluntary servitude. By law the bondservant was bound to his master for life; he was protected by law and could never be forced into the service of another. For those who know Jesus Christ as Lord, who are His bondslaves, He has abolished involuntary servitude to all else. In His service there is true freedom. This alone is the answer to slavery. "If the Son has made you free, you are free indeed."

J.B.T.

Induced Abortion

I hate to say it, and I wish it were otherwise, but as you already know, everything legal is not necessarily either ethical or moral. Once the Supreme Court has spoken on a given question, problems of legality are no longer in doubt, but the morality of the law can come in for a lot of personal and group interpretation. Individuals and groups have always made decisions on moral grounds not to obey laws they consider immoral or unjust, but I have to say that once that de-

cision is acted upon, they should expect to suffer the consequences without complaint. The fact that a law is unjust or immoral is beside the point; we can work to change it, but the law is the law.

No recent decision has stirred up more controversy than the January, 1973 Supreme Court ruling invalidating state laws against abortion, thereby enabling a woman to seek abortion from a licensed physician in the first trimester of her pregnancy, subject only to her own desires. Even the wishes of the father, legal or otherwise, need not be considered. It is the law. Wisely, in order to protect individual freedom of conscience, the Supreme Court ruled, in response to a number of lawsuits, that a physician could not be required to perform abortions.

Individuals and groups have responded to this legislation in various ways. Only two groups have found no problem with it, seeing the issue as either black or white, and both are unbendingly doctrinaire in their approach. The one group says that since the fetus is until a certain point not a person, abortion can be done with impunity, insuring only that it be done observing sound medical principles. The other group adheres to the principle that abortion is the taking of a life and on moral grounds is never justifiable, and that it should therefore be illegal as well. Most of us do not fit handily into either camp, but have a problem with the whole concept, leaning, but not entirely sold, one way or the other.

Either pat answer happens to be an oversimplification. Lives are ended every day for one reason or another and always have been, but modern society is never willing to do it with impunity. It helps in performing abortion if you can consider the fetus not "alive" in the sense of being a living human being. Though ancient man threw unwanted infants to the crocodiles, left them on rocks in the sun, or did other things we consider barbarious, the Hippocratic Oath contains a vow never to insert anything into the womb to produce abortion, so that the injunction against abortion is not something of recent origin, foisted on to mankind by the church. There is innate in man the knowledge that the thing in the mother's womb is a human child.

It has taken the brilliance of modern science and devious theology to tell us that a fetus does not become a human being until X number of

weeks. I put "X" because those doing the deciding have no agreement as to the criteria, and therefore the time. It seems to me if that time is not at conception then it must be at birth, and everyone is pretty much agreed that is too late. Actually, society is trying desperately to get off the hook in order to justify what it is going to do anyhow, just as it makes war, administers capital punishment, "pulls the plug," and so on. It is a dishonest ploy, and it makes a mockery of society's self-righteous stand on capital punishment, which seems like expiation for our other sins.

Regardless of how uncomfortable many of us may be with legalized abortion, few of us who have seen individuals wrecked physically, mentally, and spiritually by illegal abortion can take a hard line against legal abortion. Making abortion illegal did not prevent abortion. Making it legal produced, as reported by Dr. Hinman in this issue, just over 11,000 abortions in Tennessee in 1975. How many were performed in, say, 1972, before the Supreme Court ruling, is anybody's guess, but any gynecologist can tell you they were not a few. And many, many of those were disastrous.

My own quarrel is with abortion on demand, and it is on both constitutional and spiritual grounds. I think we have gone overboard to protect the freedom of the mother at the expense of her child. (I do consider—I cannot escape it—that the fetus becomes a human being at conception, because that is when a life starts.) Society's attitude here is in line with its decision to protect the rights of the criminal without giving thought to the victim. It is just another indication of the casual attitude modern society holds toward its moral decisions and commitments, and probably parallels its attitude toward marriage and towards sex—hetero and homo—in general.

We have made abortion too easy. It is possible for a woman to determine she is harboring an unwanted guest and expel it all in the same day, without consideration of alternatives or of sequelae, which sometimes are devastating. There are doubtless compelling reasons why abortion should be considered, and perhaps performed. That a woman finds motherhood distasteful or inconvenient should not be one of them. All other avenues should be explored and alternative exhausted. It should be done through family planning clinics where proper counselling is avail-

able, and not in some walk-in abortion mill.

In the long run, the answer to the problem of unwanted pregnancies is not in doing abortions but in preventing the need for them. Three-fourths of the abortions in Dr. Hinman's report were performed on unmarried women, and many of the married women had had previous abortions. The answer in today's moral climate is education. This is good preventive medicine.

Fortunately, the last word on abortion has not been written. Society is struggling with the problem, as indeed it should. Any action based on oversimplifications has tragic consequences.

J.B.T.

When the Lights Go. . . .

The unfamiliar gains meaning only as it relates to the familiar, and there are therefore some things which, no matter how much I hear about them, are outside my experience and therefore meaningless to me. I can't cope with a billion of anything—dollars, years, or people. I just know it's a whole lot. In the same way, some of the figures I keep hearing over and over again this winter leave me—you should excuse the expression—cold. I don't know how much 150 inches of snow, with 25 foot snowdrifts, is, and although a friend from Duluth, Minnesota, assures me that people there do quite well for months on end in temperatures consistently far below 0° F, I don't really know how cold —64° F is, and I'm not keen on finding out. That's how cold it was a week or so back in Chicago, where I was considering the "wind chill factor," with the thermometer standing at —18° F. I was assured it would produce instant frostbite, and I had no desire to test it. I finally went out briefly at lunchtime with the thermometer on the corner reading a cool "+0°". (It felt like "—0°".)

So much for meaningless information. Everyone, though, knows we are experiencing a very bad winter. It's too cold in the deep South, and much of the Florida citrus crop is ruined. It is too warm in the Rockies, and too dry on the West Coast. All this now has gone east, and from Ohio to New England the cold and snow have been dreadful. Buffalo is sending its snow south in rail cars to melt. It all bodes even worse for later on, with fires in the West, floods in the East, and extensive crop damage everywhere.

And then there is the fuel shortage—or is there? Since there is something un-American

about a shortage, I hear there really isn't one—that the gas producers are just holding back in order to drive the prices up. Maybe so. It seems the hardest thing to come by these days—even harder than natural gas or warm weather—is the truth. We depend so much on experience, and because we've been lied to so much, we can't recognize the truth when we hear it.

Schools have been closed, industries idled, and millions of man-hours (another of those "meaningless" figures) lost from our GNP. In desperation, we turn to the government and say, "Do something! Anything!" (right or wrong). The Congress has given the President power to regulate and ration fuel, and doubtless our consumption of energy generally will be curtailed. It is probably necessary, and undoubtedly we should have done it voluntarily sooner.

There is a peculiar quirk of human nature which is doubtless a protective mechanism for our equanimity, but which contains the seed of our destruction. It is that if something arises with which we cannot cope, we tend to act as if it does not exist. That is known as "sweeping it under the rug." Shortage or no, an energy crisis does exist, and it will not be solved by being ignored. But we need to get at its roots, and not just cut it off above ground.

In spite of what we would like to believe, fossil fuels, except for coal, are indeed running out, at least in this country. There is much dispute as to alternative sources, including how to get at the coal. The use of nuclear fuels presents problems of tremendous magnitude. Research on other alternatives is lagging far behind. Energy producers are entitled to a fair profit, and there must be adequate funds for research and development, which there have not been. On the other hand, deliberate and fraudulent withholding of energy sources should, because of its consequences, be a criminal offense.

It is doubtful that we can ever return to free and unlimited expenditure of energy, if indeed we should ever have been there in the first place. The shortage will affect us all in many ways. Charges and counter-charges do no one any good. We need to get at the facts. But since the Lord's Prayer, The Sermon on the Mount, The Ten Commandments, and Lincoln's Gettysburg Address combined contain only a few hundred words, and the Federal directive on support for the price of cabbage contains 19,000, we may none of us live that long.

J.B.T.

"Oink"

The other day I got a letter which said "Gentleperson: We are pleased to advise you . . ." and went on to talk about preparing physicians for his/her Board Examination. It was signed by two people who gave their title as "Co-chairperson."

Now I don't consider myself to be particularly chauvinistic toward my female colleagues. I have enjoyed working with them on an equal basis. I understand about the feelings of persecution some women have. On the other hand, one of my female colleagues, who was a liberated woman long before any of us knew of any such appellation, was furious when her name turned up as "Chairperson" of some committee, and exploded "Hell, I'm not any—*Chairperson!* I'm the—*Chairman!*"

All of which is beside the point, in any case. The word *man* is, in addition to being the word for the male of the species, a generic term for human being, as are all the personal pronouns applying thereto. I hereby serve notice that since this JOURNAL is striving to remain literate, and *his/her* is not so, the term (or whatever you call it) will not appear in it except as a horrible example of illiterate "Newspeak." I will use the term "chairperson" under duress. The term "gentleperson" so used is a new one on me. I always thought that to be two words describing people who don't kick animals and are kind to old ladies. I guess there isn't anything particularly wrong with using the word in this way, as it is no more nor less hypocritical than calling a person "Dear" when he (*not* he/she) isn't, or addressing people *a priori* as "Ladies and Gentlemen." But it did give me a turn.

If this makes me a male chauvinist pig, "Oink!"

J.B.T.



Problems in the ICU

To the Editor:

It was good to read the article by Joseph E. Crupie, entitled, "Psychiatric Syndromes and Other Problems in the Critical Care Units." The importance he places upon nursing input and patient care situations in NICU is gratifying. Both physicians and nurses would benefit

by his insight into the unique contribution that both disciplines make in patient care.

Rosemary A. Bowman, R.N.
Executive Director
Tennessee Nurses Association
1720 West End Bldg., Suite 400
Nashville, Tenn. 37203

Information Request on Cults

To the Editor:

For a statistical research purpose, we are attempting to accumulate data regarding the number of physicians, and other professional men in this country, who have had or still have, members of their families involved with the so-called religious cults such as:

- 1) Occult—Witchcraft and Satan Cults (Druids, etc.)
- 2) Vedic Hindu such as Hare Krishna, Divine Light mission, etc.
- 3) Christian based—Unification Church ("Moons"), Church of the Bible Understanding (Forever Family), The Way, etc.
- 4) Political—The Weathermen, National Social Labor Coalition, etc.
- 5) Pseudo Scientific—Scientology, UFO, The Foundation (The Process) etc.
- 6) Other

Inasmuch as there is a question of hypnosis being used by the cults, and also some questions regarding the health and well-being of members involved in cults, I would appreciate your cooperation in printing this letter (or a suitable notice or ad).

Interested persons should reply to:

(representing the Individual Freedom Foundation)
John G. McConahy, M.D.
143 Valhalla Drive
New Castle, PA 16105

We would also be interested in hearing from, or hearing about, any physician who is, or has been, a member of such a cult.

National Health Insurance

To the Editor:

The January issue of the TMA JOURNAL was very enlightening concerning something that has bothered physicians for many months, that is, just how representative of its members are the various medical associations. I am hopeful that the "President's Page" and the editorials are not accurate reflections of the profession's thoughts regarding national health insurance.

Just how Dr. Peerman hopes to maintain "minimal federal involvement" in a federally-sponsored bill is quite beyond me. And why Dr. Thomison is compelled to classify those opposing such legislation as "obdurate or thick-headed (or both)" certainly raises a question about his responsibility as editor of this journal.

For years, the AMA has been practically a subsidiary of HEW. Now, it appears that there are members of the hierarchy of our own Association who wish to join that group. I, for one, will tender my resignation from this body before I will be a party to the surrender of the principles of private medicine in which I believe.

The only way to return public trust in the medical profession (if it is actually missing) is to stand as men against the tide of governmental control and show the people about us that we believe in the system that has brought us the greatest medical care in the entire world. If this be "an obdurate reactionary stand," then let it so be. At least, though, it cannot be construed as surrender to evil.

Norman R. Saliba, M.D.
575 East Bledsoe Street
Gallatin, Tenn. 37066



BALL, ROBERT P., age 74. Died January 5, 1977. Graduate of the University of Louisville. Member of Roane-Anderson County Medical Society.

HAMILTON, J. RALPH, age 81. Died January 24, 1977. Graduate of the University of Tennessee School of Medicine. Member of Knoxville Academy of Medicine.

PATTON, E. WHITE, JR., age 64. Died January 11, 1977. Graduate of the Vanderbilt University School of Medicine. Member of Chattanooga-Hamilton County Medical Society.

WARNER, ROBERT JAY, age 82. Died January 29, 1977. Graduate of the Vanderbilt University School of Medicine. Member of the Nashville Academy of Medicine.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association:

BEDFORD COUNTY MEDICAL SOCIETY

Donald D. Barnes, M.D., Shelbyville

KNOXVILLE ACADEMY OF MEDICINE

Henry G. Arnold, Jr., M.D., Knoxville
Philip G. Bickers, M.D., Knoxville
Roland J. Brett, M.D., Knoxville
A. Laird Bryson, M.D., Knoxville
Evelyn E. Dresner, M.D., Knoxville
Jerome F. Eastham, M.D., Knoxville
Southgate W. Green, M.D., Knoxville
Arnold R. Hudson, M.D., Knoxville
Hugh C. Hyatt, M.D., Knoxville
Steven A. Morris, M.D., Knoxville
Robert Neely, M.D., Knoxville
James H. Segars, M.D., Knoxville
William B. Smith, M.D., Knoxville
Marvin H. Spiegel, M.D., Knoxville
Robert E. Ware, M.D., Knoxville

**MEMPHIS-SHELBY COUNTY
MEDICAL SOCIETY**

Thomas W. Monaghan, M.D., Memphis
Russell J. Proctor, M.D., Memphis
John McCullough Wilson, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

James A. Bookman, M.D., Madison
Harold H. DeBlanc, Jr., M.D., Nashville
Neil E. Green, M.D., Nashville
Edward R. Hills, M.D., Nashville
William D. Martin, M.D., Hendersonville
I. C. A. Okpalobi, M.D., Nashville
Frank W. Stevens, Jr., M.D., Nashville

**WASHINGTON-CARTER-UNICOI COUNTY
MEDICAL SOCIETY**

William R. Kincaid, M.D., Johnson City

**programs and news of
medical societies**

Knoxville Academy of Medicine

The Knoxville Academy of Medicine met on February 8 at KAM Headquarters. Dr. W. Edmund Carver, Pastor of the Second Presbyterian Church, spoke to the E Club on "Crime and Delinquency: Is There Any Way Out?"

The Sixth Annual Larry Southworth Memorial Lecture was given by Walter M. Kirkendall, M.D., Department of Medicine, University of Texas Medical School at Houston who spoke on "New and Useful Antihypertensive Agents."

Continuing Medical Education Opportunities included: Pathology—Area Pathologists met on February 16th in the UT Pathology Conference Room to discuss interesting cases.

On February 7th, Dr. Rupert B. Turnbull, Jr., Surgeon, Cleveland Clinic, spoke to the Knoxville Surgical Society on "Pitfalls in Surgery for Sigmoid Diverticulitis and How to Avoid Them."

The Academy's Medicine and Religion Committee held a Seminar on Medicine and Religion at the Academy on February 22nd and the topic of discussion was "Oncology and Problems of the Terminally Ill." Dr. John Eaddy, Dr. Albert Ebenezer, Reverend Cameron Murchison and Reverend Jack Prince all spoke at the meeting which was open to the medical and ministerial communities. Following the meeting there were questions and discussion.

national news

**THIS MONTH IN WASHINGTON
(From the AMA's Office in Washington, D.C.)
AMA Proposed NHI Bill**

Four key lawmakers, representing both political parties, have introduced into the new Congress an American Medical Association proposal for national health insurance.

Association President Richard E. Palmer, M.D. urged the 95th Congress and the Carter Administration to consider carefully "this forthright approach to national health insurance. This bill would extend health insurance to every American at a cost the nation could afford. It is a viable solution to the problem of providing quality health and medical care to everyone."

The Comprehensive Health Care Insurance Act of 1977 was introduced into the Senate by Senator Clifford P. Hansen (R-Wyo.) and in the House by Reps. Tim Lee Carter (R-Ky.), John M. Murphy (D-N.Y.), and John J. Duncan (R-Tenn.).

The medical profession's NHI plan would build on the structure of the present system of employer-employee group health insurance plans, mandating each employer to provide comprehensive and catastrophic benefit coverage with the employer picking up at least 65 percent of the cost. Employees would not be compelled to participate.

The self-employed as well as the non-employed could purchase qualified private health insurance, through pools if needed, at a cost not more than 125 percent of the cost of group plans. They would have all or part of the premium paid for by the federal government depending upon their income tax liability.

Small businesses that found the mandated plan an added financial burden would receive federal assistance.

Medicare beneficiaries could purchase supplemental insurance to bring Medicare benefits to a par with those offered elsewhere, with the government assisting people with limited resources. Medicaid would, for the most part, be supplanted under the program.

After a certain level of co-insurance was reached, depending upon income, insurance would cover all remaining expenses as a complete protection against catastrophic costs.

The co-insurance factor would deprive no one of needed care, the sponsors said. The absolute maximum that any individual would have to pay would be \$1,500; the absolute maximum for any family would be \$2,000 in any given year.

Senator Hansen, a member of the Senate Finance Committee, said:

"The bill we are introducing today would solve the problem of financing for every American. It would guarantee quality medical care to everybody. It would cover the cost of catastrophic illness. It would be fully comprehensive in terms of benefits. It would build on our present system, rather than dismantling it and replacing it from scratch with a new one requiring the creation of a giant bureaucracy. It would allow everyone to choose his or her own physician, dentist and health insurance plan. And it would be a plan we can afford.

"This legislation would cover the poor by paying all of their insurance premiums," Hansen said. "Those better able to afford to pay those premiums would be assisted in a fashion commensurate to their need by lesser degrees of government help. The affluent would even be encouraged to buy health insurance by a tax subsidy of ten percent of the premium cost.

"As the principal (Senate) sponsor, I am confident that this measure can meet our needs at a cost, in new dollars, that will not be burdensome," the Senator from Wyoming said.

Rep. Carter, ranking minority member of the House Health Subcommittee, said that "—as a member of the House Subcommittee on Health and Environment for twelve years, I have devoted much of my legislative effort to issues concerning our country's health care system. And as a physician, I have made a personal commitment to do what I can to help improve the health care of our people.

"As a co-sponsor of the Comprehensive Health Care Insurance Act of 1977," Carter continued, "I believe this measure offers a workable approach to extending health insurance to every American. In large measure, this proposal retains the expertise and experience of our existing private health care sector in both its administration and financing.

"It is these proven skills and resources of the private sector which I believe we should build upon in developing a national health insurance program, and which should be supplemented only when necessary by government.

"This proposal would provide coverage to the great bulk of the American population through employer-employee financial arrangements in which not less than 65 percent of the premium would be paid by the employer," Carter said.

"For those who are self-employed or unemployed, health insurance would be provided through an income-tax credit or federal certificate of entitlement system. Thus this plan would correct one of the major weaknesses of our present system by removing the financial barriers that in the past have denied some Americans access to high quality care."

Rep. Murphy, with Carter a member of the House Interstate and Foreign Commerce Committee, said the proposed legislation would provide "—more comprehensive benefits than any other (proposal) previously considered by Congress; and it would deliver quality health care to everyone—including the poor, and the elderly—without bankrupting the nation.

"For those unemployed, or of low or fixed income, and the elderly, premium costs would be paid by the government on an equitable sliding scale," Mr. Murphy said.

"By building the private sector and helping those who need help the most, this approach avoids many of the problems inherent in other proposals before the Congress.

"Further, it would avoid additional burdens on an already beleaguered social security system, the preservation of which must be one of our highest national priorities," according to Mr. Murphy.

Rep. Duncan, a member of the House Ways and Means Committee, questioning how Congress could write a national health insurance plan while preserving at the same time the fiscal integrity of the Treasury, said in prepared remarks:

"The Comprehensive Health Care Insurance Act of 1977 . . . controls costs by limiting federal help to those in need by determining that level of need from income tax liability. Additional cost controls are found in its co-insurance factor, except for the poor; its provision of preventive care; and its promotion of competition among health insurance carriers."

Carter Administration Health Plans

The Carter Administration has announced through its new Secretary of Health, Education and Welfare that a "well-thought through" na-

tional health insurance proposal cannot be submitted to the Congress this year.

Joseph Califano, at his first press conference after confirmation as HEW Secretary, predicted that the Administration would first concentrate on health care cost controls and better utilization of existing federal programs.

"Quite frankly," he said, "I'm not sure that we know enough about the larger problems to move faster." In addition, he said, there are other more pressing problems such as reorganization, energy, welfare reform and unemployment that will occupy much of the Administration and Congress' time.

"There's a limit on how much work can be handled intelligently in the time span," Califano said.

The new HEW Secretary also said the crucial appointment of an Assistant HEW Secretary for Health probably would not be made for a week or 10 days. He stressed the importance of such appointments, saying his choices could be the most important decisions he makes, since they will affect the source of HEW operations over the next four years.

Califano added that most of the policy-making officials at HEW under the Ford Administration are being replaced. This is what the American people expect of a new administration, he added.

Asked about reorganization of the HEW Department and the campaign proposal to make education a cabinet department, Califano predicted there would be no major reorganization proposal for his department that would be ready for submission to Congress this year.

He said he intends to "end politicization" of the National Institutes of Health, especially on the advisory committees, but did not go into any detail.

The major announcement at the conference was a comprehensive study of welfare reform bringing in all areas of government and the private sector for consultation. Califano said it is clear there is national support for an income security system, but that the public also is "impatient with the inability of our government to remove from the welfare rolls those persons improperly on them." He foresaw a "great national debate" on the issue.

Asked whether groups such as the American Medical Association and the Pharmaceutical Manufacturers Association groups with interest in the Medicaid side of welfare would be con-

sulted, Califano said they will be consulted as well as all other groups involved in welfare programs.

Califano took a couple of swipes at the former HEW Administration, saying he found a "substantial entourage" of 143 officials at the level of the Secretary's Office. He said he plans to cut this substantially and transfer these functions to the responsible agencies, at a savings of more than \$500,000.

Medicare-Medicaid Costs

Medicare and Medicaid spending next fiscal year is predicted to top \$35 billion, up more than \$5 billion for the estimate of the current fiscal year. The Ford Administration's final, and somewhat academic, budget proposal to Congress for financing the federal government next fiscal year set overall health, education and welfare spending in fiscal 1978 at \$159 billion, an increase of \$11 billion. More than \$100 billion of this, however, is in Social Security Trust Fund outlays.

There was little new in the budget plans for health compared with last year's budget except for the steady creep upward (19 percent) of costs for Medicare and Medicaid. Budget requests for most HEW health activities were kept to about this year's level. The Carter Administration is slated to submit its own federal spending plans about mid-February. These are certain to include hefty proposed boosts in some health areas.

HEW spending on health has jumped from \$9.7 billion in 1968 to a predicted \$42.2 billion. It will rise another \$3 billion next year, according to budget charts.

Medicare-Medicaid Fraud Legislation

Tightening Medicare-Medicaid fraud provisions is one of the first orders of business before Congress. Legislation has been introduced in House and Senate by key health lawmakers who pledged speedy action.

The bill, sponsored by Sen. Herman Talmadge (D-Ga.) and Reps. Paul Rogers (D-Fla.) and Dan Rostenkowski (D-Ill.), makes provider fraud a felony rather than a misdemeanor, arms Professional Standards Review Organizations (PSROs) with power to review "Medicaid Mills," require certain financial disclosures by non-physician providers, and require PSROs to turn over information to state and federal agencies investi-

gating fraud and abuse as well as health planning agencies.

Rep. Dan Rostenkowski (D-Ill.), Chairman of the House Ways and Means Subcommittee on Health, said in a House floor speech that "strong efforts must now be made both legislatively and administratively through a renewed commitment to interdepartmental cooperation to bring a sense of morality back into our federal health payment programs.

Rep. Paul Rogers (D-Fla.), Chairman of the House Commerce Subcommittee on Health, said the honest, hard-working provider suffers from instances of fraud and abuse because his reputation is damaged. "We have an obligation to all concerned to improve the administration and management of our medical care programs."

Joint hearings will be held shortly by the two subcommittees on the legislation.

The measure was considered by Congress during the last session but time ran out before action could be taken.

More sweeping changes in Medicare and Medicaid, including changes in reimbursement methods, are expected to be considered later.

Malpractice Panel Upheld

The Supreme Court has refused to review a 1975 Florida law designed to substitute mediation for professional liability litigation. Left standing was a decision last May by the Florida Supreme Court, which upheld the state's Medical Malpractice Reform Act. The law makes it mandatory for a complainant to submit to mediation before filing a lawsuit. The three-member mediation panel is composed of a circuit judge, who is the referee, plus a physician and a lawyer, the panel's conclusion as to liability may be admitted as evidence at a later trial.

Catastrophic Coverage

A congressional budget office study declares financing of catastrophic medical costs "does not appear to be a serious national problem for the 103 million persons estimated to be covered by major medical insurance."

According to the report, "major medical insurance has improved so significantly over the last five years that persons holding such coverage are adequately protected against high expenses, especially when such costs are associated with a hospital stay."

The report states that "serious coverage problems" exist for both routine and catastrophic expenses incurred by low-income families. An estimated 40 million persons with projected incomes of less than \$10,000 are either uninsured and not eligible for Medicaid or hold individual (non-group) insurance policies. "Coverage under such insurance is generally very poor." And an estimated 5.6 million families with projected 1978 incomes of less than \$10,000 will have out-of-pocket expenses for medical care which exceed 15 percent of their income, the report said.

In addition, a major coverage problem continues in providing protection against the cost of long-term care. "Neither public insurance programs, such as Medicare, nor private insurance plans provide meaningful protection against the cost of long-term care," the report noted. "Mental health services are also frequently excluded from coverage." The study said even people with otherwise good insurance can experience catastrophically high expenses for these services.

personal news

DR. JESSE E. ADAMS of Chattanooga has been installed as President of the Chattanooga-Hamilton County Medical Society. Other officers elected include: DR. ROBERT CLARK, President-Elect and DR. JOHN F. BOXELL, Secretary-Treasurer; both of Chattanooga.

DR. MARVIN A. BLANTON, III of Union City; DR. DAVID W. GAW of Nashville; and DR. BARRETT F. ROSEN also of Nashville have all been inducted as a Fellow of the American Academy of Orthopaedic Surgeons at the group's 44th Annual Meeting in Las Vegas.

DR. JERRY DEATON of Memphis has been installed as President of the medical staff at Methodist Hospital.

DR. THOMAS G. DORRITY of Memphis has been awarded the Dr. James W. Bodley Award for American Legion Post No. 1.

DR. POPE HOLLIDAY of Chattanooga has been named Chief of Staff for Erlanger and Children's Hospitals.

DR. KENNETH C. LYNCH of Kingsport has been elected Chairman of the Indian Path Hospital's Board of Trustees.

DR. DONALD C. THOMPSON of Morristown has been elected to the Fellowship in the International College of Applied Nutrition.

announcements

NATIONAL 1977

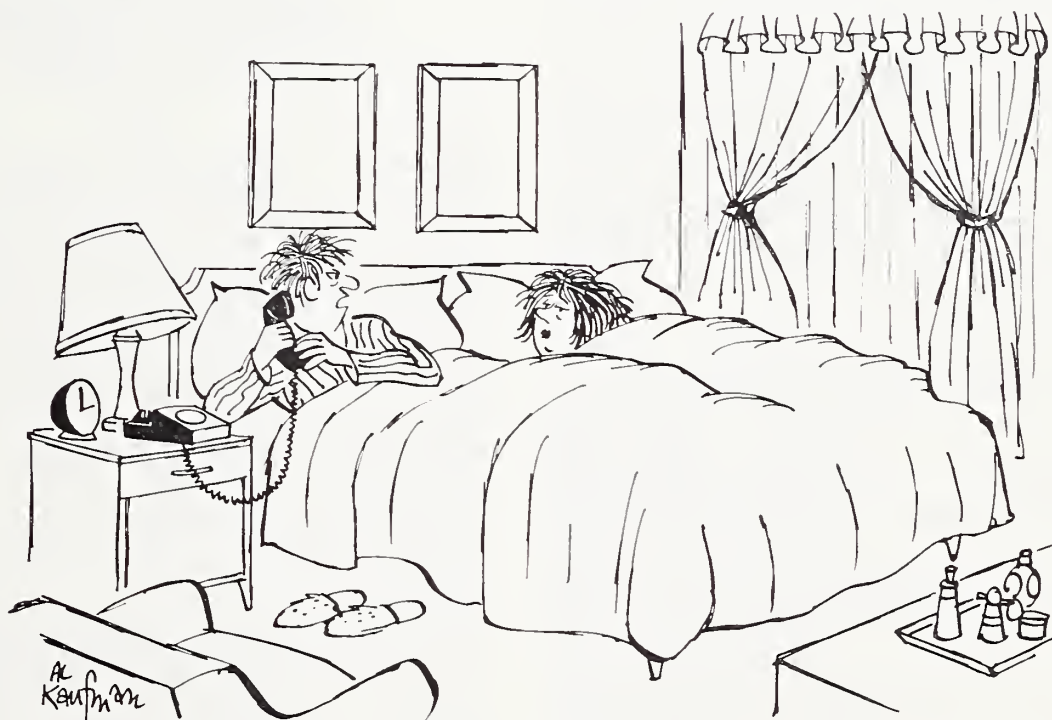
- Mar. 24-27 American Society of Internal Medicine, Alameda Plaza, Kansas City, Missouri
- Mar. 25-27 American Psychosomatic Society, Fairmont Colony Square, Atlanta
- Mar. 26-31 American Academy of Allergy, Americana Hotel, New York
- Mar. 28-31 American College of Surgeons, Los Angeles Hilton, Los Angeles
- Apr. 3-7 Southeastern Surgical Congress, Americana, Bal Harbour, Florida
- Apr. 13-14 American Geriatrics Society, San Francisco
- Apr. 17-21 American Academy of Pediatrics, New Orleans Marriott, New Orleans
- Apr. 17-22 American College of Radiology, Shamrock Hilton, Houston
- Apr. 17-24 North American Clinical Dermatologic Society, Hyatt House, Monterey, California
- Apr. 18-21 American College of Physicians, Dallas
- Apr. 19-23 Christian Medical Society, Wichita Hilton Inn, Wichita
- Apr. 23-28 American Pediatric Society, Chalfonte-Haddon, Atlanta

- Apr. 25-30 American Academy of Neurology, Atlanta Hilton, Atlanta
- Apr. 29-May 1 American Trauma Society
- May 8-11 American Association of Plastic Surgeons, Drake Hotel, Chicago
- May 9-12 American College of Obstetricians and Gynecologists, Chicago
- May 10-12 American Laryngological, Rhinological and Otological Society, Sheraton Boston, Boston
- May 15-18 American Thoracic Society, Hilton Hotel, San Francisco
- May 16-17 American Society for Clinical Oncology, Denver Hilton, Denver
- May 18-21 American Association for Cancer Research, Denver Hilton, Denver
- May 25-28 American College of Sports Medicine, Marriott, Chicago
- May 29-June 3 American Association on Mental Deficiency, Fairmont, New Orleans
- May 30-June 1 American Ophthalmological Society, The Homestead, Hot Springs, Virginia
- May 31-June 2 Society of Neurological Surgeons, Rochester, Minnesota

STATE

- Apr. 13-16 Tennessee Medical Association, Hyatt-Regency, Nashville

* * *



"IT'S DOCTOR FRISBY RETURNING YOUR CALL OF LAST NIGHT."

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Avenue, Nashville, Tennessee 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman can plan an individualized program of one-to-four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Anesthesiology	Bradley E. Smith, M.D.
Medicine	Grant W. Liddle, M.D.
Allergy & Immunology	Samuel Marney, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Endocrinology	David Rabin, M.D.; David N. Orth, M.D.
Diabetes	Oscar B. Crofford, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Oncology	Robert Oldham, M.D.

Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Orthopaedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Surgery	

General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neil, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.
Cancer Chemotherapy	Vernon H. Reynolds, M.D.

ELIGIBILITY: All licensed physicians are eligible.

ADMINISTRATIVE FEE: \$200.00 per week.

CREDIT: American Medical Association Physician's Recognition Award and American Academy of Family Physician's Continuing Education accreditation.

APPLICATION: For further information and application, contact:

Paul E. Slaton, M.D., Director, Continuing Education
305 Medical Arts Building
Nashville, Tenn. 37212 Tel. 615/322-2716

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Continuing Medical Education Schedule 1977

Mar. 30-31, Apr. 1	Hypertension: Update 1977, American College of Physicians, Grant W. Liddle, M.D.; Paul E. Slaton, M.D.
April 1	Annual Barney Brooks Lecture in Surgery Professor George Smith University of Aberdeen, Scotland Medical Amphitheater (C-2209) 4:00 p.m.
April	Prostatic Diseases in General Medicine, Robert Rhamy, M.D.
Apr. 22-23	Gynecologic Oncology and the Eighth Annual Whitacre Lecture, Conrad Julian, M.D.
Apr. 28	Annual Frank H. Luton Lecture in Psychiatry, Marc Hollender, M.D.
April 29	What's New in Obstetrics for Nurses?, Mary Freese, R.N.; Frank Boehm, M.D.
May 14	International Medicine, Vanderbilt Uni- versity Medical Alumni Reunion
May 19-20	Postgraduate Course in Allergy, Vander-

bilt University; University of Tennessee, Memphis; University of Mississippi, Philip Lieberman, M.D.; Samuel Marney, M.D.

May 25-26 Sixteenth Annual Seminar in Psychiatry, Frank Luton, M.D.

June 20, 21, 22 National Symposium on Impedance Screening in Children, Bill Wilkerson Hearing & Speech Center, Fred Bass, Ph.D.; Charles Bluestone, M.D.; Jerome Klein, M.D.; Earl Harford, Ph.D.

Aug.-Sept. Internal Medicine Intensive Review (11 sessions), Paul E. Slaton, M.D.

September Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.

September Annual Wm. F. Orr Lectureship in Psychiatry, Marc Hollender, M.D.

Oct. 17-22 Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.

December What's New in Obstetrics for Physicians?, Frank H. Boehm, M.D.

For information contact:

Vanderbilt Continuing Education
305 Medical Arts Building
Nashville, Tennessee 37212
Tel. 615/322-2716

**SYMPOSIUM ON
GYNECOLOGIC ONCOLOGY
and the
EIGHTH ANNUAL WHITACRE LECTURE
April 22-23, 1977
Vanderbilt University Campus
Nashville, TN**

Program Director: Conrad G. Julian, M.D., Professor of Obstetrics & Gynecology and Director, Gynecologic Oncology, Vanderbilt University School of Medicine.

This course is geared both to the practicing obstetrician-gynecologist and the primary care physician. The scope of the course will not include the entire spectrum of gynecologic oncology, but will rather emphasize those areas of gynecologic cancer work where there have been significant changes in diagnostic and therapeutic techniques. The goal of the symposium is that the presentations, panels and discussions will be most useful for those physicians actively involved in seeing the everyday obstetrical and gynecological patients. The programs will be presented with this end in view.

Visiting Faculty: J. Donald Woodruff, M.D., Professor of Obstetrics & Gynecology, Johns Hopkins University; Adolf Staff, M.D., Associate Professor of Obstetrics & Gynecology, Medical College of Wisconsin; Arthur Herbst, M.D., Professor and Chairman, Department of Obstetrics & Gynecology, University Pathology, and Medical Oncology.

For information and registration, contact:

Vanderbilt Continuing Education
305 Medical Arts Building
Nashville, Tennessee 37212
615/322-2716

**ANNUAL BARNEY BROOKS LECTURE
IN SURGERY**

Friday, April 1, 1977, 4:00 p.m.

**Vanderbilt University Medical Center
Medical Amphitheater (C-2209)**

Professor George Smith, University of Aberdeen,
Scotland.

**16th ANNUAL MEDICAL SYMPOSIUM
Medical Staff**

Bristol, Tennessee-Virginia

Friday, April 1, 1977

Holiday Inn I-81

The 16th Annual Medical Symposium will feature "Electrolytes and Fluids" and is sponsored by the Medical Staff of Bristol Memorial Hospital with assistance from the East Tennessee State University School of Medicine. It will be held April 1st at the Holiday Inn Convention Center in Bristol, Virginia.

Contact: Dr. Fred Vance, Jr., 210 Memorial Drive, Bristol, Tennessee 37620 for program or reservations. There is no charge for any of the activities.

**THE UNIVERSITY OF TENNESSEE
COLLEGE OF MEDICINE
Continuing Education Courses
1977**

- | | |
|-------------|---|
| Mar. 21-26 | General Review Course for Family Physicians, Memphis |
| April 4-6 | Colposcopy, Memphis |
| April 21-22 | Controversies in General Surgery, Memphis |
| April 25 | Diagnosis and Management of Common Skin Diseases |
| April 28-29 | Leigh Buring Conference, Memphis |
| May 19-20 | Allergic Diseases for Generalists |
| May 23-27 | Intensive Review of Anesthesiology, Memphis |
| May 25-28 | Basic Clinical Electrocardiography, Paris Landing Inn (Pickwick Lake) |

Address all communications to:

Division of Continuing Education and Conferences
UTCHS
800 Madison Avenue
Memphis, TN 38163

**UNIVERSITY OF TENNESSEE
CLINICAL EDUCATION CENTER**

Chattanooga

March 30	Urology Circuit Course Athens, TN
March 31	Urology Circuit Course Chattanooga, TN
April 1	Urology Circuit Course Dayton, TN
April 22-23	Pediatric ENT Chattanooga Choo-Choo
May 16-20	General Radiology Sahara Hotel Las Vegas, NV

Medicine Update '77

Athens, Tenn.	12:00 noon to 2:00 p.m.
Chattanooga, Tenn.	4:00 to 6:00 p.m.
March 24	Neurology
April 7	Endocrinology
April 28	Oncology
May 12	Infectious Disease

**ACP 1977 REGIONAL MEETINGS,
POSTGRADUATE COURSES**

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three-to-five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category I requirements for the AMA Physician's Recognition Award.

**See August 1976 and January 1977 issues
for complete listing.**

**UNIVERSITY OF KENTUCKY
Mini-Residencies for Medical and Surgical
Practitioners
in**

Office Management of Emotional Problems

One, Two and Three Week Courses. Minimum of 40 hours per week.

Tuition Fee: \$350.00 per week for the 1st & 2nd week of training; \$500.00 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that

is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

WANGENSTEEN SURGICAL SYMPOSIUM

June 9-11, 1977

**University of Kentucky Medical Center
Lexington, Kentucky**

Registration fee: \$200.00

**ENDOCRINOLOGY FOR THE
PRACTICING PHYSICIAN**

April 15-16, 1977

**University of Kentucky Medical Center
Registration Fee: \$75.00**

**THE MENOPAUSAL SYNDROME:
PHYSIOLOGY AND THERAPY**

April 21-22, 1977

**Hyatt Regency, Lexington
Lexington, Kentucky**

Registration Fee: \$100.00

**SYMPOSIUM ON RADIOLOGY OF THE
NON-TRAUMATIZED EMERGENCY
ROOM PATIENT**

May 18-20, 1977

**Hyatt Regency, Lexington
Lexington, Kentucky**

Registration Fee: \$250.00

PEDIATRIC CHEST PROBLEMS

May 26-27, 1977

**Hyatt Regency, Lexington
Lexington, Kentucky**

Registration Fee: To Be Determined

For further information about the above, contact:

Frank R. Lemon, M.D.
Continuing Education
College of Medicine
University of Kentucky
Lexington, Kentucky 40506

**AMERICAN COLLEGE OF
CHEST PHYSICIANS**

1977 POSTGRADUATE CALENDAR

Continuing Education Programs

See September, 1976 issue for listing.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

1977 Practice Management and Economic Seminar Schedule

Apr. 30- May 7	Queen Elizabeth II Cruise
June 18-25	Madrid, Spain
Aug. 20-27	Rome, Italy
Oct. 2-9	Key Biscayne, Florida

INDIANA CHAPTER

American College of Emergency Physicians Emergency Medicine Seminar

May 11-14, 1977

CME Credits Applied For: 20 Hours

Co-sponsor: Indiana University School of Medicine

Fees: \$50.00-\$100.00

Contact: Davis Gettle, M.D.

10005 Hillsdale

Carmel, Indiana 46032

317/844-7105

45th ANNUAL ASSEMBLY SOUTHEASTERN SURGICAL CONGRESS

April 3-7, 1977

Americana Hotel, Miami Beach

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

PROGRAM SCHEDULE

Mar. 21- Apr. 3	"TERMINAL CANCER: THE HOSPICE FORMULA FOR PAIN CONTROL" and "TERMINAL CANCER: THE FAM- ILY'S VIEW," with Sylvia A. Lack, M.B., Medical Director of Hospice, New Haven. "THE RATIONAL USE OF ANTI- BIOTICS IN SURGICAL PATIENTS," with Richard H. Parker, M.D., Chief, Section of Infectious Diseases, Veterans Administration Hospital, Washington, D.C.
Apr. 4-17	"BRONCHIAL ASTHMA: NEW CON- CEPTS IN MECHANISMS AND MAN- AGEMENT," with Jay A. Nadel, M.D., physiology and radiology Chief, Chest Service, Cardiovascular Research Institute, University of California, San Francisco. "MEDICO-LEGAL ASPECTS OF CPR," with Kevin M. McIntyre, M.D., Roxbury Veterans Administration Hospital, Boston. "CONGENITAL HIP DISLOCATION,"

with Robert S. Siffert, M.D., Professor
and Chairman, Department of Ortho-
pedics, Mt. Sinai Hospital, New York
City.

Apr. 18-
May 1

"THE CYANOTIC INFANT: FINDING
THE CAUSE," and

"CYANOTIC HEART DISEASE IN-
FANTS," with Richard Golinko, Brook-
dale Hospital Medical Center, Brooklyn,
N.Y.

"CORTICOSTEROID IN INFLAMMA-
TORY DISEASE," with John Carbone,
M.D., Professor of Medicine, University
of California, San Francisco.

BEHAVIOR MODIFICATION WORKSHOPS

Behavior Modification Workshops, presented by Dr.
Luke Watson, Dr. Richard Foxx and Dr. John McKee,
will be held on Saturdays, in April through November,
1977 in the following cities: Washington, D.C., Balti-
more, Atlanta, Los Angeles, St. Louis, Toronto, Minne-
apolis, Bahamas, San Francisco, Seattle, Boston, Phila-
delphia, Fort Lauderdale and Honolulu. Workshop
fees will be \$30. For further information, contact:
BMT, Inc., 81 Arcadia Drive, Tuscaloosa, Alabama
35401, phone—(205)-553-2277.

EMERGENCY CARE SYMPOSIUM

The relationship between the clinical and managerial
aspects of emergency care is the theme of the 1977
Winter Symposium sponsored by the American College
of Emergency Physicians (ACEP) to be held March
14-17 in Scottsdale, Arizona.

The four day symposium includes clinical programs
for physicians and managerial programs for emergency
department administrators. Postgraduate courses during
the morning will offer a structured continuing education
experience, while informal sessions each afternoon will
give participants the opportunity to exchange ideas and
information.

Clinical postgraduate courses will deal with such
topics as electrical-cardiotherapy in the emergency
department, sex in the emergency department, aortic
emergencies, genital injuries, penetrating injuries, dam-
aged digits and fingertip injuries, the emergency medi-
cine aspects of suicide, and emergency psychiatric
commitment.

Managerial courses include disaster planning and man-
agement, security in the emergency department, keeping
emergency records, emergency department budgeting
and purchasing, emergency department accounting, pa-
tient transfer, health planning on the national and
local level, and a detailed discussion of the latest
federal legislation and funding.

Further information and a complete program can
be obtained by writing the American College of Emer-
gency Physicians, 3900 Capital City Boulevard, Lans-
ing, Michigan 48906.

EMERGENCY MEDICINE COURSE

"Treatment of the Seriously Injured or Ill in the Emergency Department," a continuing education course for physicians and residents, will be held May 4-6, 1977, at the Sheraton Dallas Hotel, Southland Center, Dallas, Texas.

The course is sponsored by the American College of Surgeons Committee on Trauma, and co-sponsored by the Southwestern Medical School, Dallas, and the ACS Local Committee on Trauma, Dallas.

The course, offering a comprehensive program of continuing education in the definitive treatment of the seriously injured, is designed to enhance the knowledge and skills of physicians who are first confronted with trauma patients in rural, suburban and urban hospitals.

Course curriculum will include such trauma topics as: development of an EMS system, monitoring the severely injured patient, legal aspects of emergency care, management of the unconscious patient, management of psychiatric emergencies, drug abuse, and the evaluation and management of various emergencies.

The course has a limited registration of 250. For physicians, advance registration is \$185; registration at the door is \$200. The registration fee for residents is \$100. Advance registration forms may be obtained by writing to Dr. Thal at Department of Surgery, University of Texas Health Science Center, 5323 Harry Hines, Dallas, Texas 75235, or by writing to the Trauma Division, American College of Surgeons, 55 E. Erie, Chicago, Illinois 60611.

THE NATIONAL ENDOWMENT FOR THE HUMANITIES ANNOUNCES HUMANITIES SEMINARS FOR MEDICAL PRACTITIONERS

The National Endowment for the Humanities announces four one-month humanities seminars for physicians and other members of the health professions to be held in the summer and fall of 1977. Members of the medical profession will be brought together with distinguished humanists from the fields of philosophy and religion for the month of full-time study which will be devoted to such issues as ethical conflicts, the rights of patients and practitioners, and health delivery.

Up to 15 participants will attend each seminar tuition free and will receive a \$1,200 stipend to cover expenses, plus reimbursement for travel up to a \$300 maximum. Participants may be accompanied by members of their families, but the stipend will not be increased.

James F. Childress, Professor of Christian Ethics at the Center for Bioethics, Kennedy Institute, Georgetown University, will conduct a seminar at Mt. Vernon College in Washington, D.C., July 3-29. The seminar will examine the ethical aspects of care, consent, paternalism, and the distribution of health care.

H. Tristram Engelhardt, Jr., a philosopher and physician currently at the Institute for the Medical Humanities of the University of Texas Medical Branch at Galveston will direct a seminar in the Washington, D. C. area September 11-October 6. The seminar will examine the general issue of patients' rights and the particular issue of the right to health care.

John Lachs, Professor of Philosophy at Vanderbilt University, will hold a July 11-August 5 seminar at Vanderbilt on individual rights and the public good in the treatment of humans. The aim will be to help health professionals relate some of the pressing concerns of their daily practice to these larger issues.

William F. May, Professor in the Department of Religious Studies at Indiana University in Bloomington, will direct a seminar on the campus at Williams College, Williamstown, Massachusetts, June 26-July 22. Participants will explore ways of interpreting human nature and obligation as they affect decisions in medical practice.

Applications are invited from physicians and other members of the health professions. Selection of participants will be made by the seminar directors with the advice of selection committees. The application deadline is April 15 with selections to be announced about April 25, except for Professor Engelhardt's seminar, which is May 31; selections will be announced about June 8.

Further information, including a leaflet describing the seminars in greater detail and application forms, may be obtained from:

Professor James F. Childress
Center for Bioethics
Kennedy Institute
Georgetown University
Washington, D.C. 20057

Professor H. Tristram Engelhardt, Jr.
Institute for the Medical Humanities
University of Texas Medical Branch
Galveston, Texas 77550

Professor John Lachs
Box 12, Station B
Vanderbilt University
Nashville, Tennessee 37235

Professor William F. May
c/o Linda Bernstein
The Poynter Center
Indiana University
410 North Park
Bloomington, Indiana 47401

NATIONAL CONFERENCE ON HIGH BLOOD PRESSURE CONTROL April 13-15, 1977 Washington Hilton, Washington, D.C.

The registration fee for the conference is \$50 if post-marked before March 25, 1977, and \$65 after that date. This fee includes all conference materials, admission to conference sessions, the Wednesday night reception and banquet, and the Thursday luncheon.

For additional information, please contact:

Ms. Wendy Martin
Conference Coordinator
National Conference on High Blood Pressure Control
1501 Wilson Boulevard, Suite 600
Arlington, Virginia 22209
703/522-5155



Declaration '76

Westford, Massachusetts was founded in 1729 as a church colony. Town government, including the churches, centered around a typical, elm-shaded New England common which also had a parade of maple trees to train the local militia to remain in line behind their leader. The population in 1900 was 3,800; in 1955 it was 6,000; it is now over 16,000. Events, local and national, associated with this growth led to the following declaration presented to citizens assembled on the village green to celebrate the Bicentennial '76.

"We, the undersigned, inhabitants of the Town of Westford, again subscribing to the high principles and reasoned phrases of the Declaration of Independence, now in this bicentennial year, conceive it our duty and our right to protest the political evils and usurpations of power which at all levels of government have threatened and continue to threaten our lives and liberties and our pursuit of happiness. Let our protests be submitted to a candid world.

"Those who sit in the seats of authority are too little aware of a basic principle of the wise men who founded this republic—that governments derive their just powers from the consent of the governed.

"Government by decree, often arbitrary and capricious, has more and more swollen a system of bureaucratic dictatorship in violation of the sound tradition that people should be governed according to laws enacted by elected representatives answerable solely to the people. And the people suffer.

"Our representatives in all positions speak glibly of the will of the people, of unswerving service to the people, of their undying loyalty to the people; yet many, too many, deal only in empty phrases. They refuse their assent to laws wholesome and necessary for the public good and neglect to pass laws of immediate and pressing importance.

"Too many of our representatives in all positions wrap about themselves the mantle of purity and point accusing fingers at others so that the

latter may be found full of guilt and the former may savor the warmth of hypocritical innocence.

Lust for Power

"They prate constantly of our form of government as being one of laws and not of men; yet in their groups of power they live by their own laws and make no accounting of conduct or expenditure except in carefully programmed statements or hearings where calculated disclosure or subtle withholding takes the place of evenhanded fairness and moral justice.

"They listen with attentive ear and silenced tongue to special groups to which the words "change" and "reform" are sacrosanct in any context; and so act that minorities, in thought, belief, strivings, or mere lust for power prevail over opposed, perhaps disregarded, majorities.

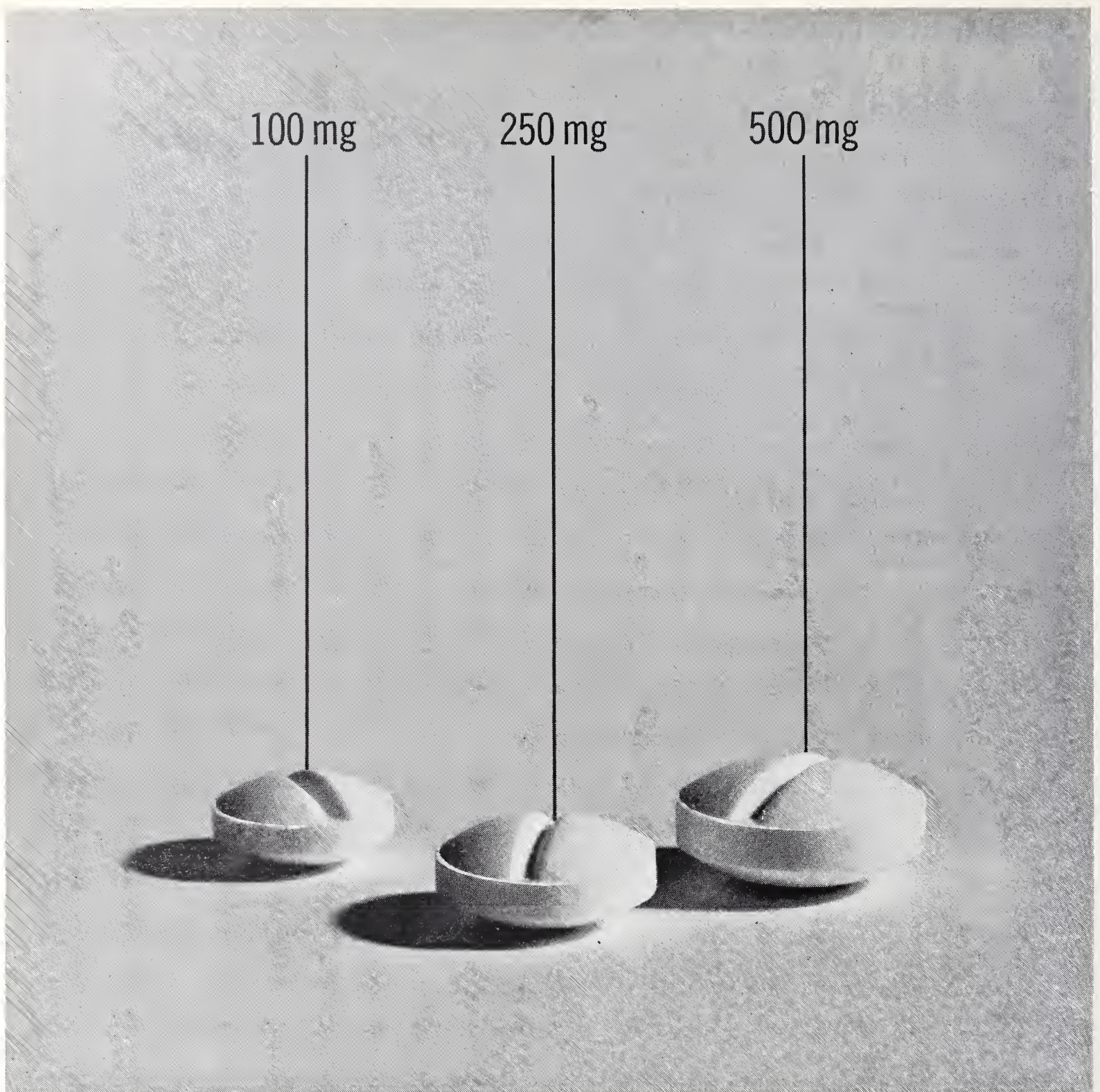
"They have erected a multitude of new offices and of oppressive taxes, have sent swarms of officers to harass us and to eat out our substance. Tax monies have been promised for oftentimes laudable purposes, and then denied to us; and none assumes blame but rather casts blame on anyone who is deemed vulnerable or is incapable of answer or denial.

"To whom should we address a petition of redress? To whom should we announce an end to our patient sufferance? Those who govern will not answer unless it suits their special conveniences. The journalists and commentators, hiding behind the shield of the First Amendment, are rarely able to free themselves from brazen prejudice or personal considerations. Let us band together to protect our freedoms, and, with the help of Divine Providence, let us mutually pledge ourselves to a redress of our grievances.

"Done in the Town of Westford, Commonwealth of Massachusetts, on the Fourth Day of July, Anno Domini MCMLXXVI and in the Two Hundredth year of our freedom from ancient oppressions. Signed by twenty-one residents of Westford."

It seems clear that time has done little to change the problems concerned with freedom. Democracy has indeed acquired the privileges of monarchies.

Reprinted from the *Massachusetts Physician*, Dec., 1976.



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AMA Sets High Standards For Future Physicians

The American Medical Association is the vehicle by which a legacy of professional excellence is handed on, the AMA's executive vice president, James H. Sammons, M.D., declared in a year-end AMA report for 1976.

"The standard of medicine the next generation (of doctors) will practice directly relates to what AMA members are doing now," Dr. Sammons tells the AMA membership of some 200,000 American medical doctors.

AMA expenditures, \$42.9 million, two-thirds of which come from dues, are reported in six broad categories: Disseminating scientific information, \$16.4 million; Representing the profession, \$4.3 million; Serving the public, \$3.4 million; Assisting the physician and his practice, \$7.6 million; Upgrading care through educational standards, \$5.3 million; and, Strengthening organized medicine, \$5.9 million.

"At heart, the AMA is an educational, scientific and informational organization. It is primarily dedicated to keeping the standards of American medicine as they are—highest in the world. Not many years ago American physicians went abroad to seek advanced training. Today the process is reversed. High standards were the original purpose of the AMA in 1847. And the focus of the AMA today is still on high professional standards," Dr. Sammons says.

Continuing education for physicians received greater emphasis in 1976, and the AMA increased its budget in this area by \$500,000. In the past three years there has been a doubling of the number of top-rated continuing education courses offered by the AMA. Ten regional educational meetings were held in 1976 and 15 are planned for next year.

By late 1976, more than 58,000 physicians had been awarded the AMA's Physician's Recognition Award, certifying their completion of 150 hours of continuing medical education over the preceding three years.

The AMA in 1976 supported through testimony before Congress proposals, legislation or programs addressed to training more physicians and allied health personnel, financial assistance to medical schools, encouraging physicians to locate in underserved areas, venereal disease research and treatment, immunizations, including A/New Jersey/76 flu, improved emergency care for local communities, maternal and child health, crippled children services, alcoholism, drug abuse and mental health, Medicaid fraud, review of medical devices by the FDA, lead-based paint poisoning, family planning, pay incentives for physicians in uniform, and a bill to improve health care for the American Indian.

Model AMA legislation regarding the impaired physician has been helpful in the enactment of new laws in some 20 states. Two model bills to strengthen state

medical licensing boards have been submitted by the AMA to state medical societies to assist their efforts toward better policing of the profession. AMA-drafted guidelines have assisted states in revisions of the tort system of malpractice adjudication in 40 states.

Although in the past five years Congress has considered more health-related bills than in the previous 50, lobbying remained a relatively minor part of AMA's overall program. A staff headed by seven AMA lawyers and five registered lobbyists carried on a legislative program with an overall budget of \$971,000, or 2.3 percent of the AMA total budget. Officers and trustees of the AMA testified before Congressional health committees 24 times during the year, and in 72 other cases written comment was submitted.

In serving the public, the AMA is now what may be termed a "consumerist" or "environmentalist" organization, Dr. Sammons declares.

"Long before it was a popular cause, the AMA pioneered clear stream laws. The AMA gave strong impetus to efforts resulting in iodized salt and bread enriched by vitamins. Pure food and drug laws, public sanitation measures of many sorts and the exposure of pseudo-medicine in all forms are long-standing AMA causes."

In 1976 the public service programs were extended to include a national drive against violence on television and an extensive pilot program for improved health care in the nation's jails.

Warning—Ototoxic Drugs

Ototoxic drugs produce irreversible nerve deafness (often complete) and severe balance problems. While it is sometimes necessary to use these drugs in a life-threatening situation, we urge you to refrain from their use on a prophylactic basis or when some other drug might be used with equal therapeutic effect.

Neomycin, Kanamycin, Streptomycin, and Gentamycin are some of the more common antibiotics associated with ototoxicity when administered parenterally. Generally, adequate renal function reduces the chance of an ototoxic side effect. Monitoring the B.U.N. and creatinine gives an indication of glomerular filtration and, therefore, antibiotic retention. (Serum levels of the drug give more precise control over possible side effects.) Ear symptoms and audio-metric testing are helpful; however, they may be late symptoms of toxicity and thus should not be used alone.

Ethacrynic acid (Edecrin) and furosemide (Lasix) are ototoxic drugs in the diuretic group. Generally, the hearing loss here is transient, unless higher than normal doses are given in the impaired renal patient.

Salicylate levels of 35 mgm% are associated with tinnitus and, at times, hearing loss. This is reversible usually on cessation of the drug. Quinine and chloroquine are ototoxic and more of historical significance. A drug of more recent development having toxic effects on the ear is nitrogen mustard.

We encourage you to use a non-ototoxic drug when the choice exists. When an ototoxic drug must be used, monitoring of toxic effects is extremely important. Quality of life is markedly reduced by hearing loss and balance disturbances. A good rule of thumb is:

if the antibiotic must be given parenterally to be effective, chances are it is ototoxic.

The Otolaryngology Section
The Nashville Academy of Ophthalmology and
Otolaryngology

Noise-Induced Hearing Loss

Six million U.S. workers suffer from noise-induced hearing losses, says a Stanford Research Institute (SRI) researcher. Dr. James Young points out that workers in such noisy environments as printing presses, foundries and food processing plants risk losing the ability to discern crucial speech frequencies after 3 to 20 years.

Background noise on the job drowns out their co-workers' voices, he says, and even the typical hum at a bar or cocktail party makes it difficult for afflicted persons to hear their friends' conversation. Many workers with such a hearing loss also suffer from tinnitus, and many are unable to benefit from any of the hearing aids available today.

The cost to the worker of such a hearing loss is incalculable, Young goes on to say. It limits his job advancement, destroys his self-confidence, and isolates him from his associates. If he fails to hear a shouted warning at a crucial moment, it could cost him his life.

The industry-wide maximum noise level set by the Occupational Safety and Health Administration (OSHA) is currently 90 decibels for an eight-hour day—higher for shorter periods of exposure. Ninety decibels is about as loud as a subway train crashing through the station. Exposure to this amount of noise for eight hours a day would cause a definite hearing loss in a sensitive individual after several years. The top management of the AFL/CIO and other unions have called for a 50 percent reduction in this noise maximum.

OSHA requires that noise be reduced wherever possible by means of engineering controls—for example, by redesigning noisy equipment or encasing it in sound-proofing—rather than by putting hearing protection devices such as plugs or muffs on the workers. Organized labor strongly supports this requirement.

According to Young, the main problem with hearing protection devices is their relative unreliability. Some are ill fitting or poorly designed, he says, and even when they fit properly, workers may neglect to wear the devices or may displace them slightly by chewing gum or shouting.

The cost of instituting engineering controls to reduce noise will be enormous. An economic impact analysis recently released by the Department of Labor estimates the cost of meeting OSHA's current 90-decibel standard throughout U. S. industry at \$10 billion—far more than any offsetting reduction in liability costs such as workmen's compensation claims, court awards, etc., at present levels. Young points out, however, that liability costs may be expected to rise as workers and the general public begin to appreciate what noise-induced hearing loss means to the individual and his family.

AMA Enters Litigation on Professional Advertising

Unrestricted advertising of prices or fees in newspapers by attorneys or physicians is not in the best interest of their clients or patients, declares a brief filed this month with the U. S. Supreme Court by the American Medical Association.

The AMA brief is filed as a friend of the court in a case appealed from the Supreme Court of Arizona in which two attorneys are seeking to overturn the prescription of the Arizona State Supreme Court against unrestricted advertising of fees by attorneys in the state.

Advertising in the highly sophisticated field of medicine raises considerations quite different from the advertising of consumer products and simple services, the AMA points out.

There is significant potential that some apparently truthful claims will mislead the ordinary consumer to his economic and physical detriment. There also is risk that some non-deceptive statement can cause the quality of service rendered by physicians to deteriorate. For instance, the physician may fail to order necessary lab tests and X-rays because the cost would exceed his advertised fee for a given service.

Although the Arizona case involves attorneys, the same considerations would apply in medicine, the AMA points out.

The brief points out that the AMA does not proscribe all advertising by physicians. The ban is against solicitation of patients through use of testimonials, claims of expected results of treatment, claims that imply superior skills to other physicians, or claims that contain incorrect or incomplete facts.

The public is entitled to know the names of physicians, the location of their offices, their office hours and other useful information that will enable people to make a more informed choice of physician. This may be done through office signs, professional cards, dignified announcements, telephone directory listings, and reputable directories of physicians.

Revised Clinical Research Studies Booklet

The Clinical Center, research hospital of the National Institutes of Health in Bethesda, Maryland, has issued a revised edition of its booklet, **CURRENT CLINICAL STUDIES AND PATIENT REFERRAL PROCEDURE**.

This publication, designed especially for physicians, describes the clinical research studies now in progress and outlines the procedure to be followed by those physicians wishing to refer patients to the Clinical Center for study.

Copies of this booklet are available from
Chief, Office of Clinical Reports and Inquiries
The Clinical Center
Building 10, Room 1N-242
National Institutes of Health
Bethesda, Maryland 20014

1976 ASMA—Eaton Medical Art Album Published

Award-winning entries in the 18th annual American Student Medical Association (AMSA)—Eaton Laboratories medical art award competition appear in the just-published 1976 AMSA—Eaton Medical Art Album.

Copies of the album have been provided to contest winners, hospital directors of medical education, medical school faculty members, medical school libraries and to all AMSA members. A limited number of albums are available, on request, from Eaton Laboratories. While the supply lasts, single copies of the 1976 Album may be obtained, at no charge, from Eaton Laboratories, Professional Services Dept., Division of Morton-Norwich Products, Inc., Norwich, New York, 13815.

First Aid for Little People

Do your young patients know what to do in a first aid emergency? *First Aid for Little People*, a new educational kit, can help them. The kit, sponsored by the Johnson & Johnson Health Care Division, was designed for young children (ages 6-9) and introduces them to basic first aid concepts.

The First Aid for Little People booklet, which is included in the kit, is written in simple language and illustrated with large clear drawings. It defines first aid, tells how to avoid accidents, and explains how to get help in an emergency. The booklet also tells how to deal with various emergencies such as bleeding, poisoning and nosebleeds.

One examination copy of the *First Aid for Little People* booklet is available free. Booklets in lots of 30 may be obtained for \$1.50. Complete kits containing: 1 cartoon filmstrip, 1 cassette, 30 student booklets, 1 instructor's folder, 4 spirit masters, and 30 student award patches, may be purchased for \$8.50. To order a *First Aid for Little People* kit or booklets, contact: Instructional Materials Laboratories, Inc., 200 Madison Avenue, New York, New York 10016.

Some Individuals Prefer Psychosis to Sanity

Elwood Dowd is real. There are some folks who would rather be crazy than sane. This is the finding of a research report published in the current (December) issue of *Archives of General Psychiatry*, a publication of the American Medical Association. Theodore Van Putten, M.D., of the Veterans Administration Hospital, Los Angeles, and colleagues, report on a study of 29 schizophrenics who invariably discontinued medication to control their illness, only to be readmitted several months later.

"Although we cannot prove it, these hard-core drug refusers seem to prefer florid psychosis to a drug-induced relative normality," says Dr. Van Putten. The drug-refusers experienced a grandiose psychosis shortly after they stopped their medication. Conversely, depression and anxiety affected those who took their medications regularly and controlled the mental illness.

Dr. Van Putten cited one example, a 30-year-old

man readmitted for the 19th time because of florid psychosis. He spoke of being a "composer," of having "billions," and of being "the greatest aeronautical engineer in the world." He spent most of his time sketching "satellite stations" and would often demand to talk to his "publisher."

Under medication, these grandiose symptoms subsided, but he then mentioned loneliness and his realistic lack of any life accomplishments. He became aware that he was mentally ill. At this point he left the hospital and resumed living in a lonely hotel. He was readmitted three months later, psychotic as before.

Says Dr. Van Putten: "The hard-core drug-refusers resemble Elwood P. Dowd, the whimsical hero of the play, *Harvey*. When his psychiatrist urged him to struggle with reality, he responded: 'Doctor, I wrestled with reality for 40 years and I am happy to state that I finally won out over it.'"

Some Children Need Another Measles Immunization

Children immunized against measles before the age of 13 months may be inadequately protected and should be reimmunized, says a research report in the Jan. 24 *Journal of the American Medical Association*.

Anne S. Yeager, M.D., of Stanford University School of Medicine, California, and colleagues studied the protective levels against measles in the blood of 465 children in two California counties, and found that 14.6 percent of the children immunized at 12 months of age were inadequately protected against the disease. But only 5.2 percent of those immunized at 13 months or later had inadequate protection. The problem likely is that the younger children still had some degree of protection inherited from their mothers, and this factor interfered with the effectiveness of the vaccine.

Measles in the United States had dropped from a pre-vaccine figure of half a million cases annually to some 35,000, with a corresponding drop in measles-induced encephalitis, an occasional serious effect of the disease. Experts in the field now recommend that measles immunization be deferred until about age 15 months for infants who live in communities where the disease is not prevalent. Vaccinations should be given any time after six months during measles outbreaks, and these children should then be revaccinated after 15 months.

Surfer's Ear is Hazard to Ocean Enthusiasts

Surfer's Ear is a bony growth inside the ear canal, brought on by continuous exposure to cold ocean water and big waves over a period of years, says Daniel M. Seftel, M.D., in a report in the January issue of *Archives of Otolaryngology*. If the growth becomes large enough, it can cause a "plugged ear" and affect hearing, says Dr. Seftel.

During a four-year period Dr. Seftel operated on 12 patients for Surfer's Ear. The surfers were men between 20 and 48 years of age. They surfed two to three hours per day, four days a week, for an

average of 13 years. All had severe hyperostosis. In some, the eardrum was completely obscured by the bony growth.

Ostosis sometimes occurs in active swimmers, but is much more severe in surfers. Dr. Seftel points out that the turbulence of large ocean waves will force more water into the ear canal of a surfer than an ordinary swimmer.

It takes a lot of steady surfing—seven to ten years—to develop the ear growth, and the occasional weekend surfer probably has little risk. Surfers may avoid the risk by wearing custom-fitted, molded ear plugs. The plug entirely fills the ear cavity. Dr. Seftel advises that a small cord be attached to the ear plug and strung around the neck. The plug might pop out if the surfer turned a flop in a big wave.

Dying Patient's Wishes Gets Priority from Doctors

Most physicians try to respect the wishes of a dying patient who doesn't want extraordinary measures used to prolong the last spark of life, even though the doctor's legal and ethical position is sometimes not clear.

Doctors were asked:

"Let's say a patient is terminally ill and has expressly indicated that no extraordinary measures be used to keep him alive when death is imminent. Since all the legal and ethical issues involved are not yet completely resolved, what do you think is the best course for the physician to follow?"

Responses varied, but most physicians surveyed seemed to feel that when a patient has made a "no intervention" decision, a doctor should respect it, providing minimal support care and making the patient as comfortable and free from pain as possible.

Many physicians, however, say that this course of action should be pursued only after a thorough discussion with the patient and his family, and only after the decision is carefully noted in the record. A few doctors say they would seek legal counsel or seek guidance from other non-involved physicians.

The real dilemma arises, some doctors say, when a patient wants to be allowed to die and his family wants every measure used to keep him alive. There were no good answers to this situation.

More than three-fourths of the poll respondents say they do discuss imminent death with terminally ill patients who are able to respond. They explain options and inquire about a patient's wishes regarding medical care during a terminal illness. Some 94.5 percent of the respondents say they try to adhere to the patient's wishes.

AMA Issues New Book on Skin and Hair Care

Watch out for those wild promises of creams and other cosmetics that claim to erase wrinkles and rejuvenate aging skin. They don't do it. Turtle oil or mink oil are no better than oils commonly used in cosmetic preparations. No cosmetic will restore youth and beauty. Lemon juice adds nothing helpful to shampoos or cosmetics, despite some advertising

claims. Facial treatment with eggs won't actually do anything for your face.

Cosmetic products such as cold cream or face powder are basically so much alike that selection of one brand or another actually boils down to personal preference for shade, scent, texture or even package design. Price isn't necessarily a guide. Some low cost items are just as good as the more expensive offerings.

These and many other guidelines to assist the consumer in wading through the overwhelming array of claims and counter-claims of products sold to enhance personal appearance and improve skin health are offered in the new, third edition of the American Medical Association's Book of Skin and Hair Care, published this winter by J. B. Lippincott Co.

Titled **THE AMA BOOK OF SKIN AND HAIR CARE**, the third edition is an update and expansion of the earlier volume, **THE LOOK YOU LIKE**. All were edited by Linda Allen Schoen, in consultation with the AMA's Committee on Cutaneous Health and Cosmetics.

The book includes three general areas: cosmetics, hair, and skin. Individual chapters cover topics such as cosmetic creams, rejuvenating cosmetics, reactions to cosmetics, hair dyes and bleaches, hair waving and straightening, excess hair, shaving advice, baldness, acne and blemishes, wrinkles, birthmarks, dry or oily skin, problems of hands, nails and feet, perspiration and body odor, soaps and bathing, sunlight and the skin, and esthetic surgery.

None of the presently available antiperspirants completely stop perspiration, nor is this desirable, the book points out. Degree of perspiration control varies from 5 percent to 40 percent. To guide consumers in selecting an antiperspirant, the book includes a table listing the ingredients of more than two dozen of the most popular brands. Similar information is offered in other cosmetic areas.

The book is not available through the AMA, but may be obtained in paperback for \$4.95 from the publisher, J. B. Lippincott Co.

* * *

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A calendar listing of over 500 national/international meetings, conferences and seminars in the medical sciences for 1977. All medical specialties included. Send a \$10.00 check or money order payable to Professional Calendars, P.O. Box 40083, Washington, D.C. 20016

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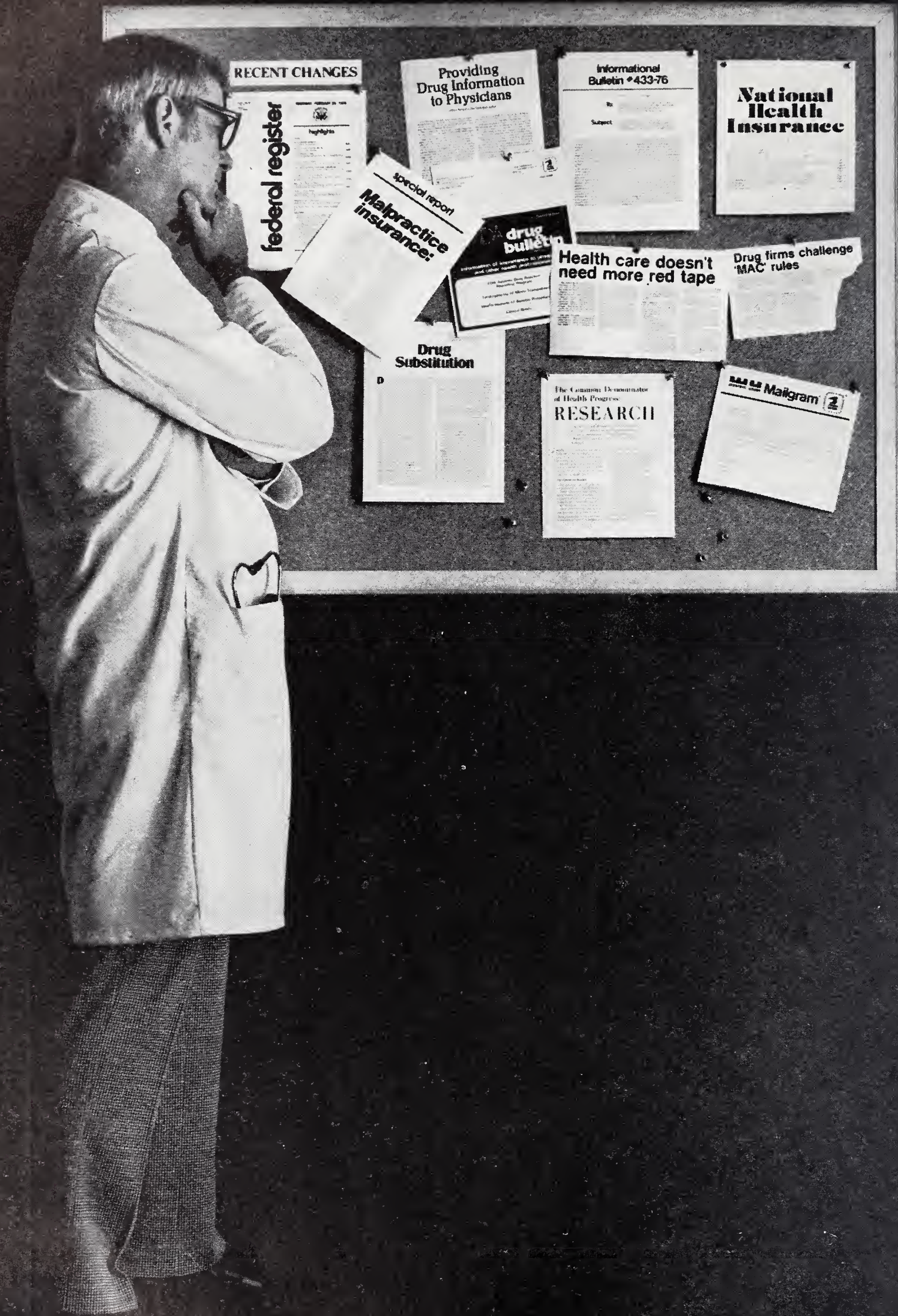
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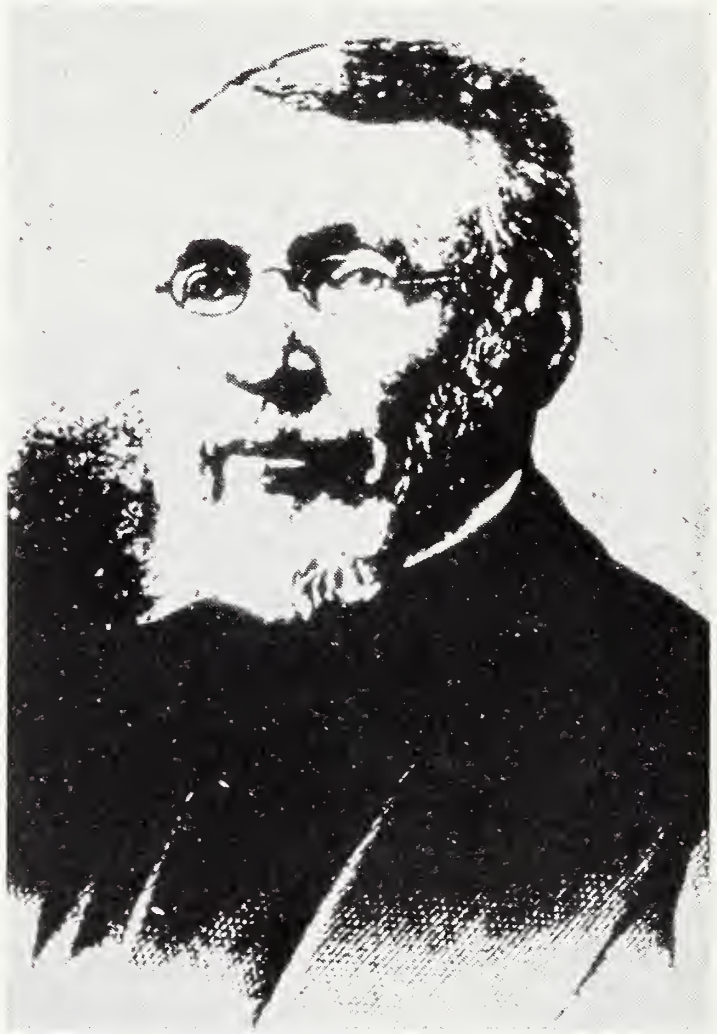
Paul Fitzsimmons Eve, M.D.

J. LYNWOOD HERRINGTON, JR., M.D.

Paul Fitzsimmons Eve was perhaps the most outstanding Southern surgeon of the nineteenth century. His reputation was not only national, but world wide. His career was colored with the romance of high adventure and achievements in war in which his marvelous skill was devoted to the cause of patriotism and humanity. He was a scholarly teacher, a prolific writer, and a keen investigator; during his lifetime he held the chair of surgery in five different medical schools. In addition, he was offered, but refused, the chair of surgery in several other outstanding medical institutions. He was deeply admired and respected by his friends and professional colleagues of such note as J. Marion Sims; Samuel D. Gross, a founder of the American Surgical Association; Crawford W. Long; Valentine Mott; Charles Pancoast; Benjamin Windslow Dudley, the great professor at the Transylvania Medical School in Lexington, Ky.; and the renowned Daniel Drake of Cincinnati. When his long and useful life ended, the impact of his death was felt, not only in America but throughout the surgical world. Memorial services were held in numerous places both in this country and abroad, and it is said that when the news of his death reached the various medical schools, lecturers stopped their classes to pay homage to his name. One of his contemporaries stated, "Of all men whom I have heard lecture, in force and presence he was the grandest. He outgrew all of his contemporaries, and his life served as an example for others as to how high personal merit can rise."

Paul Fitzsimmons Eve was born June 27, 1806, in Forest Hall, Ga., a hamlet located on the Savannah River, six miles south of Augusta.

This and the three papers following were presented as a memorial to Paul Fitzsimmons Eve, M.D., by the Nashville Surgical Society, April 6, 1976.



Paul Fitzsimmons Eve, M.D.
1806-1877

He was the youngest son of Captain Oswald and Aphrae Eve and the youngest of 11 children. On the father's side, he was of English descent; on the mother's side, he was of Scotch-Irish blood. His father had been a captain of a Pennsylvania company before the Revolutionary War and had been a classmate of Benjamin Rush.

In his very early childhood, Paul Fitzsimmons Eve was taught his letters by his widowed sister, Mrs. Sarah Adams. His first school years were at Richmond Academy in Augusta, an outstanding

boy's school which to this day continues to enjoy a fine reputation. He later attended school at Mt. Zion in Hancock County, Georgia, and finally he attended Franklin College in Athens, Ga., which is now the University of Georgia, where he graduated in August 1826, receiving an AB degree and finishing second in a class of 24 students. His college education totalled four years, and later the institution conferred upon him the degrees of AM and LLD.

Early in life, young Eve displayed a keen desire to study medicine. He chose the University of Pennsylvania Medical School because it was one of the most celebrated of its day and because his father had close ties with the medical profession in Pennsylvania. He studied under Dr. Charles D. Meigs for a period of two years, receiving his MD degree in 1828. The curriculum consisted mainly of a series of lectures comprising various medical topics. Dr. Eve's diploma bore the names of Hare, Cox, DeWeese, Gibson, Horner and the great Philip Physick. His graduating thesis was on uterine hemorrhage, a subject on which his renowned preceptors were amply proficient to impart ideas that are standard even to this day. After graduation, Dr. Eve expressed a desire to remain in Philadelphia to further pursue his medical endeavors, but the severe illness of his father necessitated his return to Georgia. There he gave his careful and unremitting attention to his father—an act of devotion that was instrumental in shaping his life for future greatness. It was during the illness of his father that he first conceived his preference for surgery, his attention being turned in this direction by the necessary and frequent urinary catheterizations that he performed on his father for urinary retention resulting from an enlarged prostate. He was later to become the outstanding lithotomist of his era. Also, while attending his father, he began the practice of medicine in Augusta in the office with a Dr. Watkins, his brother-in-law. Dr. Eve's father, Captain Eve, died in August of 1829.

Following the death of his father, Dr. Eve was fired with enthusiasm over the possibilities of surgery and the desire to progress in his profession. He chose to visit and study in the European clinics and left for Europe in the fall of 1829, sailing from the port of Charleston, S.C., in a ship loaded with cotton. He arrived in Liverpool in December after 28 days aboard ship. He vis-

ited in Dublin and Belfast, and returned to Liverpool before going on to London. In London he studied briefly under Sir Astley Cooper and James Abernathy. He became acquainted with several other distinguished professional gentlemen including Sir James Paget, Sir James Thompson, and Sir William Thompson. In 1830 he went to Paris, where he studied for 18 months. His mentors were Barren, Larrey, Dupytren, Roux, Lesfranc, Cruvelhier, Velpeau and others. Each of these great minds was extremely impressed with young Eve, and lasting friendships were made between Eve and the surgical giants of Europe. During the next 40 years, Dr. Eve made six additional trips to Europe, renewing his friendships and seeking additional knowledge. Aside from Dr. Eve's numerous original contributions to surgery, he introduced for the first time at least a dozen operations to America that he had been able to master during his European studies.

Along with his surgical interests, at the age of 24 he was also an adventurer with definite political opinions, ready to fight for any cause in which he believed. While in Europe, he was an active participant in the revolution which took place in Paris in 1830, and in the Polish revolution against Russian oppression. One hundred years later, in 1930, the Polish government made posthumous tributes to Professor Eve and erected a monument to him which still stands on Green Street in Augusta, Ga. A monument was also unveiled in Warsaw, Poland in a medical school building named after him.

Dr. Eve returned to America in 1832, filled with even more energy and enthusiasm, eager to put his many new ideas into practice. He had already established a surgical reputation and was appointed professor of surgery at the newly established Medical College of Georgia in Augusta. There he rapidly gained national and international reputation as a teacher, writer, and operating surgeon. Early in his professional life, he was elected vice-president of the American Medical Association, of which he later became president. Honor after honor began to be bestowed upon him.

While at Augusta, Professor Eve carried out his operations under chloroform anesthesia, which was popular in the South. It was during his professorship at Georgia that he first had contact with Dr. Crawford W. Long of Jefferson, Ga., who had employed sulfuric ether as an anesthetic

in March 1942. He failed to record his experience, however, until several years after Morton's first report appeared, and when he sought recognition for the priority of his discovery he appealed to Professor Eve for support. At first Eve was not interested, but as data accumulated, he became an enthusiastic supporter of Long and his claims and urged him to present his cause before the AMA. The controversy as to which of the two investigators first used ether remains largely unsettled today except below the Mason Dixon line and particularly in the state of Georgia, where Morton's name is virtually unknown.

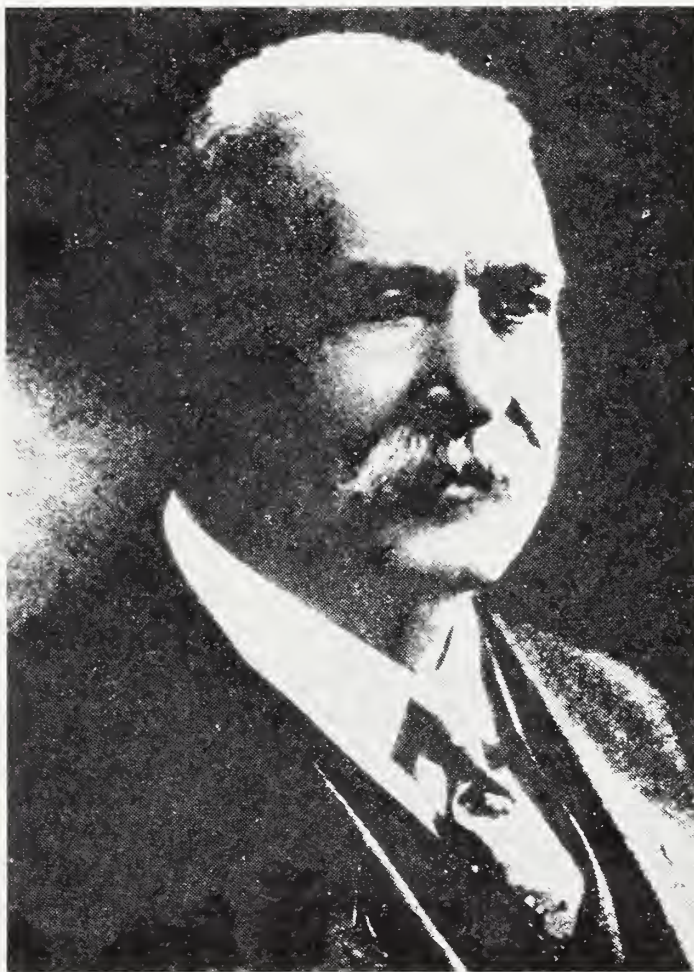
In closing, I should like to mention a word about Professor Eve's family. In December of 1832, shortly after taking over the professorship at Augusta, Dr. Eve married Sarah Twiggs of Richmond County, Georgia. She soon died, but the marriage produced two children, a daughter, and a son. The daughter married Col. B. K. Stevenson who became the first president of the

Nashville and Chattanooga Railway. The family later moved to New York. Dr. Eve's son, George, did not pursue a medical career.

After the death of his first wife, Professor Eve married Sarah Duncan of Barnwell, S.C., who survived him by nearly 20 years. There were three children by his second wife, a daughter, Sarah, and two sons, Duncan and Paul F., II. Paul Fitzsimmons Eve, II, became a noted surgeon and at one time was professor of surgery in the Medical Department of the University of Tennessee. The other son, Duncan, likewise became an outstanding Nashville surgeon who founded the Nashville Medical College and served as both its dean and professor of surgery. He was also vice-president and later professor of surgery in the School of Medicine at Vanderbilt University, and became president of the AMA. He had a son Duncan Eve, Jr., M.D., an outstanding Nashville surgeon who died in 1963.



Paul F. Eve, II, M.D.
1857-1914



Duncan Eve, M.D.
1853-1937

The Military Career and Some Urological Works of Paul F. Eve, M.D.

HARRY SHELLEY, M.D.

Dr. Paul F. Eve was involved in five military adventures. The first, you might say, he fell into when he was studying in Paris. This was the three-day war, July 26-29, 1830, when Charles X, the last of the Bourbons, was dethroned. Eve probably treated cuts and bruises and removed bullets, for in those days it was believed that the bullet should always be removed from the wound.

His next adventure was of his own choosing. The Poles had revolted against the Russians, and Eve felt that he should help the Poles to repay in part the debt America owed for the help given by Kosciusko in the American Revolution. Aided by letters from Marquis de Lafayette, he reached Poland in the spring of 1831, where he served first in a hospital and was later assigned to the field as ambulance surgeon to General Turner's Division.

This war lasted only a few months; the Russians captured Warsaw in September 1831. Fortunately for Eve, he was not in the city at that time. He was later captured, but was able to obtain his release by claiming he had cholera. Whether he had it or not is not certain. On the recommendation of Count Place, chief of the Army Medical Service, he was awarded the Gold Cross of Honor of Poland for his services.

Eve has left us an account of 123 gunshot wounds he treated in a Polish hospital with sodium chloride solution (about twice normal strength). Of these 123 cases, 42 returned to duty in two months and 38 were nearly ready; that would be a 65% cure.¹

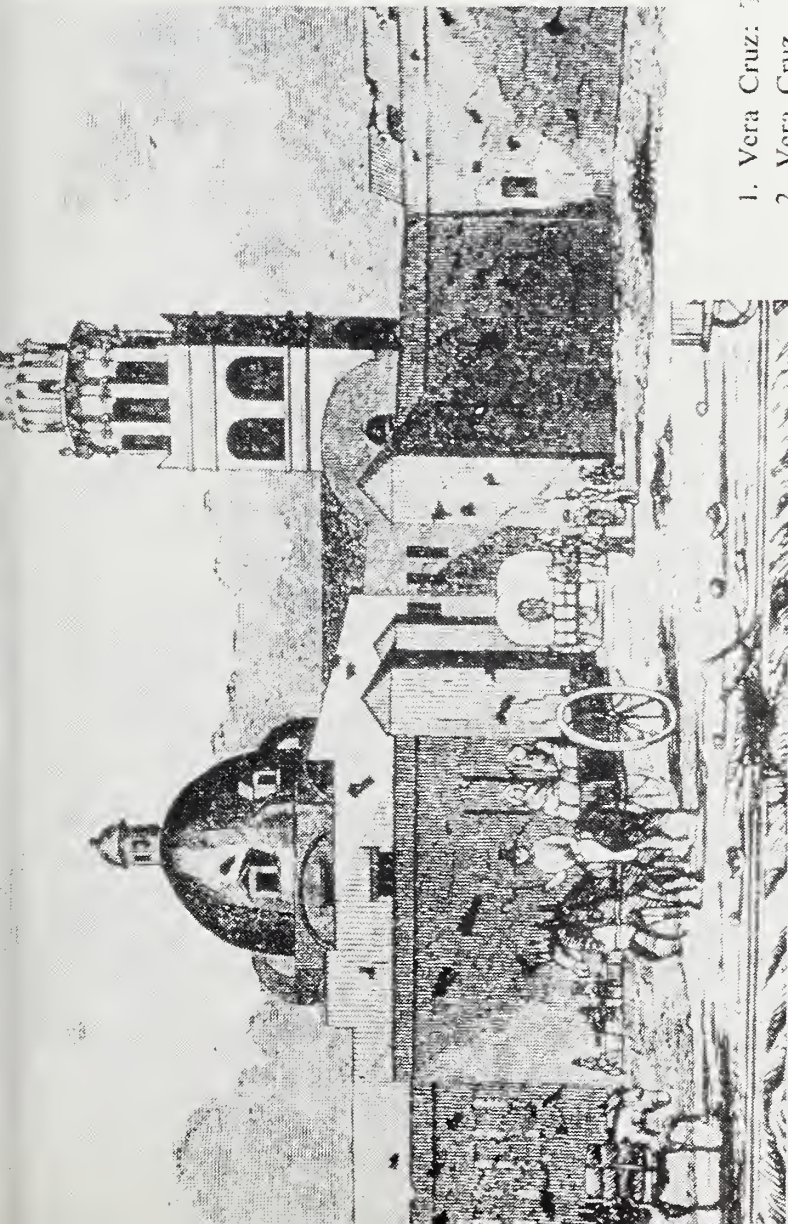
In 1846 the Mexican War broke out, and Dr. Eve was the first physician to volunteer his services. He was accepted and entered Mexico with a Georgia regiment. Later he commanded hospitals which received casualties from the battles of Monterey (May 1846) and Cerro-Gordo (April 1847). He tells of the case of General Shields, who was shot at Cerro-Gordo. The bullet, apparently a "grape-shot," entered the right chest and passed through the mediastinum without injuring either the trachea or the esophagus. The General did not spit blood, nor was he knocked down after being shot, and he was able to give com-

mands. He said, however, that at the time he experienced the most excruciating pain.²

The next war was over before Eve could get into it. That was the start of the Wars of Italian Independence, in which France and Italy under Napoleon III fought Austria. He was able to visit the battlefields of Magenta (June 4, 1859) and Salfereno (June 24, 1859). He visited hospitals in Turin and talked with the surgeons and compared ideas. They agreed that when a bone was involved, a gunshot wound of the arm had a much better prognosis than one of the thigh, and that few patients with such thigh wounds survived.

He was in his last war, the American Civil War, from the beginning to the end. He was 55 years old at its start. In the spring of 1861, before Tennessee had seceded, he was appointed surgeon general of a provisional Army of Tennessee, but he resigned, and B. W. Avent of Murfreesboro was appointed in his place. Eve continued to treat casualties, however, in the Nashville hospitals during the summer and fall. He was appointed surgeon in the Confederate States Army Dec. 20, 1861. When Forts Henry and Donelson fell in February 1862, Eve, with his instrument case under his arm and taking his blind father-in-law with him, left Nashville the night of Feb. 16. (His family was in Augusta.) Six days later he was commander and surgeon of the Gate-City Hospital in Atlanta. He was at Shiloh in April 1862, then in Columbus, and then back at the Gate-City Hospital at the end of the year. This hospital was in a second-rate hotel of 32 rooms and was constantly overcrowded with patients. Eve, who probably had more military medical experience than many of his superior officers, had several run-ins with them. He offered to resign, but his offers were quickly rejected, and this quieted all the complaints.

In the first quarter of 1863, his Gate-City Hospital treated 1,253 casualties. Of these, 353 were returned to duty, 222 were furloughed, and 44 deserted, leaving 619 that were probably fit for duty. Twenty-three were discharged and 64 died—87 lost to duty. The remaining 547 were still

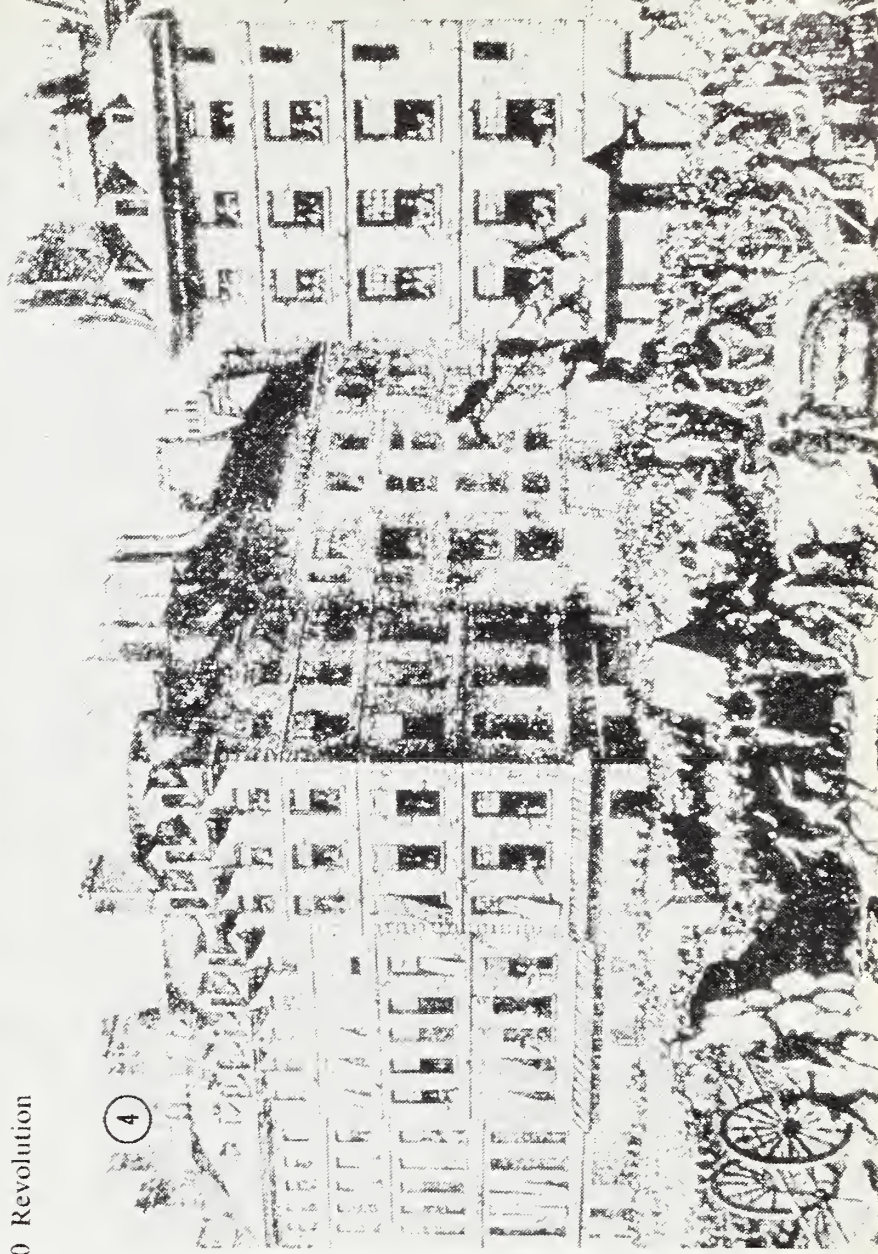
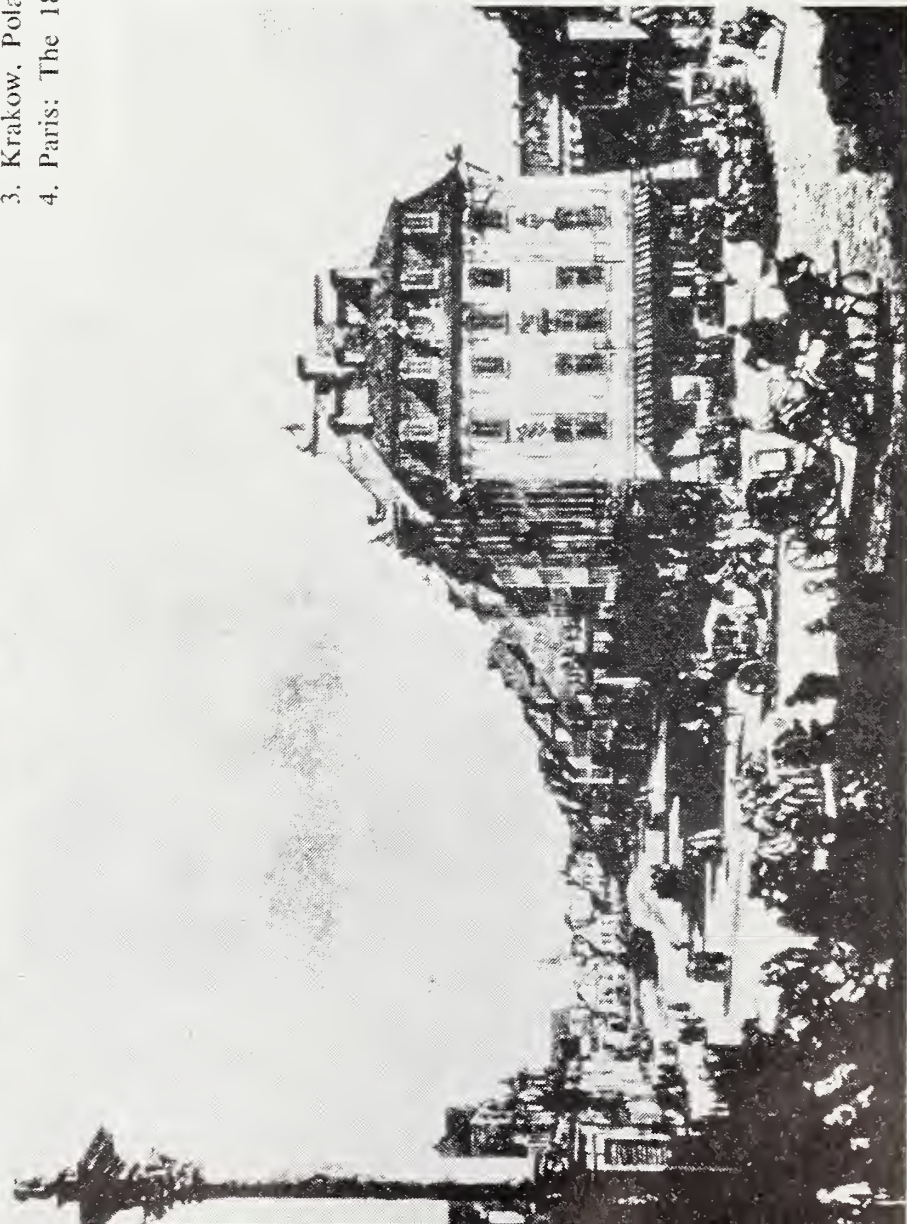


1. Vera Cruz: The Hospital Gate

2. Vera Cruz

3. Krakow, Poland

4. Paris: The 1830 Revolution



EVE: MILITARY CAREER/Shelley

in the hospital. This is not a bad record for a war-time hospital.³

Eve reported some of the cases he treated in the war. One, a Texan, in a gunfight in 1859 was shot in the left temple, left thigh above the knee, and on the right side, the bullet ranging up the right side of the spine. He fell and lost control of his legs, but shot and killed his opponent. He had bloody urine, was jaundiced, and for six weeks could not walk. He ended up with a right foot drop. In 1861 he joined the army and in 1866 Eve performed a Pirogoff amputation of his right foot because of the foot drop. When this case was reported in 1868 the man was a night watchman in a Nashville bank.⁴

Another case Eve reported was one of eight lithotomies that he did during the war. It was on a Mr. O'Bannion, the second lithotomy that Eve performed on this man and the third that had been done on him. He died from erysipelas 12 days after the operation. (Eve commented that there were no other cases of this disease in the ward.) The story of Mr. O'Bannion is a long one.

In 1824, when he was 18 years old, while working on a house that was blown down during a tornado, he was struck in the back with a piece of timber. From that time he dated all his difficulties in urinating. For the next 24 years he tried "all the prescriptions of professionals and non-professionals, and even became a sailor on the ocean"—all without help.

When Eve first saw him, in 1848, for two years he had had to assume the horizontal position and press on the bladder with a finger in the rectum in order to urinate. Eve found a crepitating mass in the left perineum. A bilateral perineal lithotomy was done, and many stones were removed from the bladder and the perineal mass, along with considerable pus. He was much improved for six years, after which he had more trouble. He was again operated on, this time by Eve's cousin. Eve performed the third operation, a left lateral lithotomy, in 1863. Over the years a total of 193 stones were removed from Mr. O'Bannion.⁵

After the war, Eve was asked by Colonel Otis of the US Army to gather certain statistics on amputations in the Southern Army. He collected reports of 20 hip amputations: of these, 15 died. All but one of the operations had been done immediately after the initial injury. Of the five

survivors, only one had an immediate amputation. Eve collected 13 cases of resection of the femur. Eight, on whom the operation had been done immediately, died. Of the remaining five, one had an immediate operation and that was to remove a piece of loose bone. Shortening of the leg of these five varied from one to four inches.⁶ These, of course, were not Eve's cases. Apparently he did not do this type of operation during the war.

At the request of the US Sanitary Commission in 1866, he reported concerning the health of the Southern Army that (1) measles and diarrhea were the most common diseases; (2) rural troops had more sickness than city troops, especially childhood diseases; (3) "psora" (camp itch, not scabies) was more marked after Shiloh (April 1862), and that it slowed healing of wounds and was apparently related to uncleanness; (4) "land scurvy" (thrombopenic purpura) was most noticeable late in the war. His treatment for it was buttermilk, lime or lemon juice, and wine or brandy.⁷

Although Dr. Eve seemed to prefer otolaryngology, he did considerable urology. He did more lithotomies than Dr. Benjamin W. Dudley of Lexington, Ky. In his lifetime he did 238, with a mortality of 8%—all these in the preantiseptic days and some in the preanesthetic days.⁸ He preferred the bilateral operation and used Dupuytren's double lithotome caché, a slightly curved instrument with two concealed knives that, after passage into the bladder, could be opened to make a cut of any desired width in the prostate.⁹

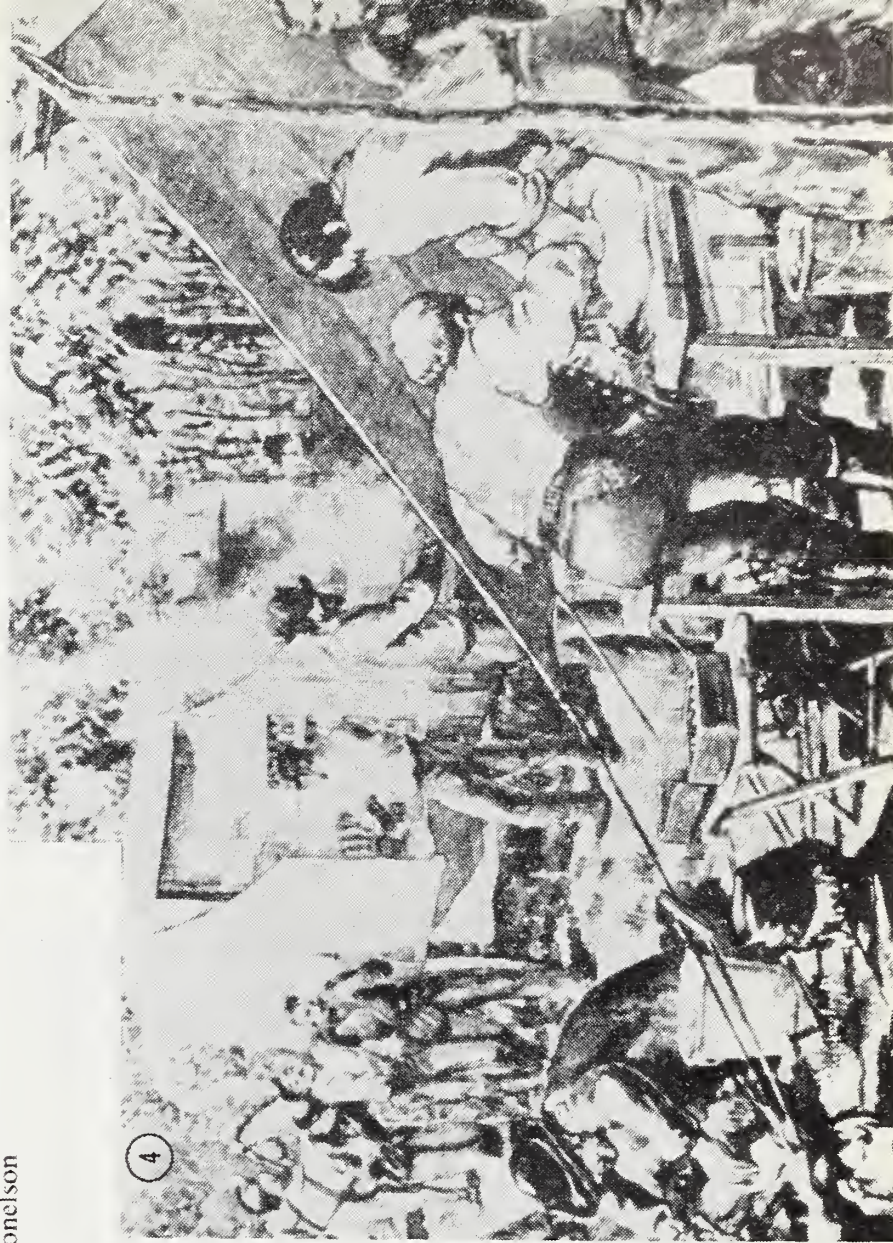
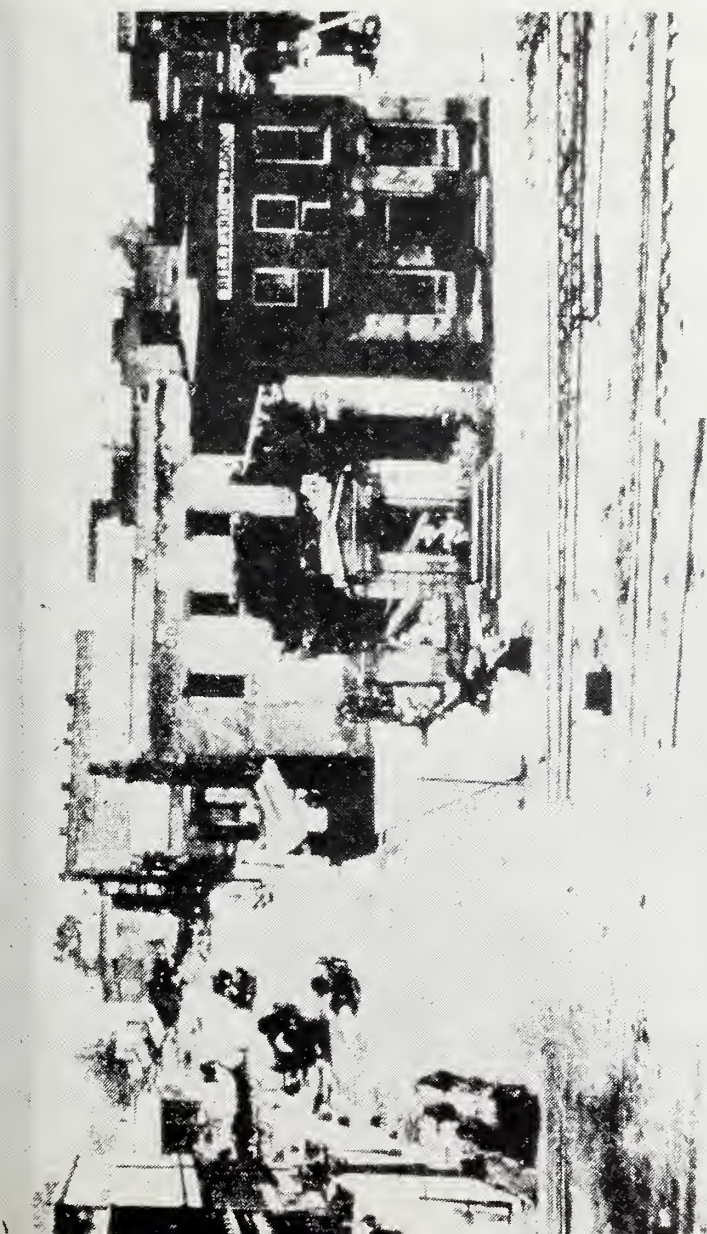
In the period from 1841 to 1871 he reported 100 cases with 11 deaths. He used the bilateral operation in 87 of these cases, the suprapubic in two, and the lateral in three. He did four lithotrities. He did two operations to remove a stone through a vesico-vaginal fistula. He did one operation to remove a stone by dilating the urethra and another by cutting the urethra.¹⁰ From this it is evident that Eve was familiar with, and used all types of, bladder stone operations.

He reported one fatal case of tunneling for the enlarged prostate. Here the sound passed through the right lobe of the prostate, through the bladder muscle and undermined the bladder mucosa without entering the bladder.¹¹

Eve's treatment of varicocele was unique. He removed four square inches of skin from the left scrotum and closed the incision with pins, about which he placed a figure-eight ligature. When the cord was reached, the veins were separated from



1. Atlanta after the surrender: The Gate City Hospital
2. Forrest leading the retreat from Fort Donelson
3. The retreat from Fort Donelson
4. Shiloh: A tent hospital



EVE: MILITARY CAREER/Shelley

the artery and the vas, and then tied with a ligature of deer or buffalo sinew just tight enough to stop the circulation. He preferred pins to needles, as they did not rust. He started to remove the pins on the fourth day and had them all out in six days.¹² Hydroceles he treated by aspiration and injection of iodine.

Strictures he dilated daily using a Benique flexible sound. He did not believe in cutting them or in using caustics. He showed a certain humor when he told of one patient's stricture. "I may be permitted to remark, that so noted was this stricture, upon his return home, some of his neighbors demanded ocular demonstration that he could urinate. He, in true Western hyperbolic language, offered to aid any water wheel deficient in power, if they would allow him to mount a fence."¹³

Eve was an all-around surgeon of international recognition. At a time when most surgeons were anything but Halstedian in their operating tech-

nique and lost many patients, he had a remarkably low mortality rate, due, I believe, to his preoperative preparation of the patient and his gentle handling of tissue.

Acknowledgment: Illustrations are by courtesy of Benjamin F. Byrd, Jr., M.D.

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If we shall suppose that American slavery is one of those offenses which, in the providence of God, must needs come, but which, having continued through His appointed time, He now wills to remove, and that He gives to both North and South this terrible war as the woe due to those by whom the offense came, shall we discern therein any departure from those divine attributes which the believers in a living God always ascribe to Him?

Fondly do we hope, fervently do we pray, that this mighty scourge of war may speedily pass away. Yet, if God wills that it continue until all the wealth piled by the bondsman's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn with the lash shall be paid by another drawn with the sword, as was said three thousand years ago, so still it must be said "the judgments of the Lord are true and righteous altogether."

With malice toward none, with charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds, to care for him who shall have borne the battle and for his widow and his orphan, to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations.

Abraham Lincoln
SECOND INAUGURAL ADDRESS
MARCH 4, 1865

Paul Fitzsimmons Eve, M.D., Otolaryngologist

WILLIAM G. KENNON, JR., M.D.

I am indebted to Dr. Byrd for introducing me to a man with whose career I was only vaguely familiar. I will confine my remarks to Dr. Eve's work in the head and neck area. Dr. Eve was a prolific writer, and he meticulously narrated many of his medical experiences for the benefit of his colleagues. There is no way that we can know how many of his more routine cases were not preserved on paper for our edification. I'm sure there must have been many. A sufficient number of cases in the head and neck field have been described to lead me to think that he had considerable surgical experience in this area. In fact, one of his students, T. H. Roddy, indicates that Dr. Eve had an extraordinary interest in surgery of the head and neck. Dr. Roddy took 13 pages of notes detailing instructions on head and neck operations. Some written accounts of Dr. Eve's surgical experiences have been lost to us, but I offer the following list of titles to indicate that this area was to him a familiar one:

1. Fourteen cases of operation on the jaws
2. Removal of a fibroid polypus from the base of the cranium
3. Excision of a scirrhus tumor near the tonsil
4. Excision of nearly one-half the lower jaw for osteosarcoma
5. Extraction of a tailor's thimble impacted from the right posterior naris
6. Watermelon seed in bronchus expelled by coughing
7. One half-dime extracted from larynx
8. Death from foreign body (bone) cutting from pharynx to larynx
9. Granule of corn removed from right bronchus by coughing
10. Cockle burr extracted from glottis with forceps
11. Fishbone in duct of Steno
12. Did Congressman Brooks die of croup?
13. Piece of tin in trachea removed by laryngo-tracheotomy
14. Large glass bead in trachea removed by tracheotomy

15. Removal of the parotid gland in a state of scirrhus degeneration
16. Removal of a large, soft tumor from the left nostril
17. Removal of a fibrocartilaginous tumor involving both superior maxillary bones
18. Unsuccessful case of trephining of the antrum of Highmore resulting in death within 50 hours
19. Removal of a nail from the left bronchus by tracheotomy

The large number of reports of foreign bodies in the air passages in the foregoing list should not lead us to assume that Dr. Eve was primarily a pioneer endoscopist. All of us will agree that some of the most dramatic and crucial situations in our experiences are concerned with the problem of establishing or maintaining an airway. Reflect for a moment on the drama involved when a nineteenth century physician was confronted with a case of an obstructing foreign body in an airway. It is natural that a prolific writer such as Dr. Eve would be inspired to record such instances.

I would like to describe, more or less in Dr. Eve's words, accounts of two of his cases.

As recorded in *The Nashville Journal of Medicine and Surgery* (vol. V, 1853), the patient was a 5-year-old child who two weeks prior to operation had inserted a four penny nail into a cotton spool in order to make a whistle. On inspiration, preparatory to blowing the whistle, he aspirated the nail into his tracheobronchial tree. Acute respiratory distress ensued, and the immediate treatment had consisted of the use of emetics and the holding up of the patient by his heels and striking him repeatedly between the shoulders and over his sternum. When he reached Dr. Eve, the latter observed that there was a "large bronchial rhonchus, distinct at a distance" more marked on the left side. Examination was difficult, however, due to the "extreme repugnance of the patient and his consequent restlessness." Dr. Eve watched him a few days and then recommended tracheotomy. The use of magnets was considered.

EVE: OTOLARYNGOLOGIST/Kennon

It was decided to use chloroform, and this agent was administered by Professor Means.

A longitudinal incision was made in the midline and the trachea was exposed. Bleeding was slight, attributed by Dr. Eve to his policy of staying close to the midline and keeping the knifeblade "up." The trachea was opened at the fifth ring, and three or four rings were slit. Trousseau's tracheal forceps was used to maintain the opening in the trachea. A curved forceps made by Mr. J. D. Smith of Nashville was introduced, but the foreign body could not be felt. Dr. Henry Campbell then introduced a probe and the nail was located in the left main bronchus. Having been located it was seized and extracted with Mr. Smith's forceps. Its head was down and the nail was very rough. It was 1½ inches long and slightly oxidized. The time of operation was 30 minutes, part of which was spent waiting for bleeding to stop before opening the trachea and also for vomiting to subside, his stomach having been filled by misplaced kindness to prepare him for operation. The operation was performed in an open piazza with the temperature 84F. The wound was closed with two sutures. These were later removed because of threatened emphysema.

Two hours after the operation the patient was taken to his boarding house in a carriage. Ising-glass plaster was later used to close the wound. The scrub team consisted of Drs. Eve, Ford, McKie, J. A. Eve, Henry and Robert Campbell, Broadhurst, Dearing, and Simmons. It is interesting to speculate how well any of us would have fared under similar circumstances: the chloroform anesthesia, no suction, the open piazza, and eight assistants crowding around a 5-year-old, all possibly offering advice.

The second account is that of the removal of a large fibrous tumor from the base of the cranium by excision of portions of the right superior maxillary and palate bones. This case was reported in the *Southern Medical Surgical Journal* (vol. I, 1837), and concerns a 21-year-old male with a lifelong obstruction of his right naris. On examination there was a large polyp presenting anteriorly. Part of this was removed by tearing it away with forceps. At this point, Dr. Eve decided to do the rest of the operation later. It is my speculation that his postponement may have been prompted by bleeding. Six months later, the patient had developed proptosis on the

right. In the presence of the class then attending his lectures he opened the antrum and extracted a portion of the polypus. He then slit the soft palate. Even with this exposure, he could not remove all the tumor with his forceps, scissors and hooks, and the patient was discharged.

He was next seen 6 months later, at which time his hearing was observed to be impaired, both nostrils were closed, and his teeth had been displaced downward. Dr. Dugas, and Messrs. Alfriend, Roberts and Byrd (students) assisted as Dr. Eve did a lateral rhinotomy on the right. He wrapped a tape around the exposed tumor and avulsed it. Bleeding was brisk, as we would express it today, and was controlled by injections of a strong solution of sulfate of zinc. All the tumor not having been removed by this maneuver he then took some pruning shears and divided the superior maxilla between the first and second incisors on the right, then the nasal process transversely on the floor of the nose. Six teeth and the alveolar process were removed. The palatine process of the superior maxilla and the palatine plate of the hard palate were removed. The exposed tumor was found to be adhering to the basilar processes of the occipital and sphenoid bones and the internal plate of the pterygoid process. It was filled with large venous sinuses and very fibrous. It was about the size of a man's fist. During the procedure (no mention having been made of anesthesia) Dr. Eve notes that the patient fainted several times. He did not fully revive for three days. Three weeks after operation he was sent home, healed except for his open palate. There was very little apparent deformity of his face. It was planned to close the palate at a later operation, but this was never done. Twenty years later, Dr. Eve learned that the patient was in good health, living near the Etowah River in the vicinity of Cartersville, Ga.

It is my belief that this tumor was undoubtedly what we know today as a juvenile angiofibroma. These very vascular neoplasms are difficult problems, due particularly to the profuse bleeding usually encountered during their removal. We would not attempt such an operation today without an adequate supply of blood on hand, good illumination, suction, and general, intratracheal anesthesia.

This is but a brief glimpse of Paul Fitzsimmons Eve—the otorhinolaryngologist. A more "in-depth" study of his activities in this field is quite rewarding.

Paul Fitzsimmons Eve, M. D., Academician

BENJAMIN F. BYRD, JR., M.D.

The return of Paul Fitzsimmons Eve from his military adventures in Poland in January of 1832 marked the beginning of his long and distinguished career as a teacher of medicine, particularly in the field of surgery. The culmination of this career is probably a fitting place to start in a presentation of the academic prowess of this remarkable person. At the centennial celebration of the United States in 1876 in Philadelphia, Paul Fitzsimmons Eve was asked to present the centennial address on surgery. He opened this address to the gentlemen of the International Medical Congress with the statement as follows:

The language of the Aborigines of America has ever been admired for its simplicity and significance. In the State of Mississippi, itself implying the father of all waters, is a county called Itawambi, derived from the title given an Indian chief upon whom all possible honors had been conferred, so that nothing more could be done for him. Standing here this day, the representative of the most demonstrative and efficient department of the healing art; the recipient too of many unmerited favors; fully conscious of the inability to do justice to the subject proposed, or satisfactorily improve the illustrious occasion—an event without precedent, and which no living man will ever see again—language fails to convey or words express what is now felt. With all the simplicity of the Indian and the sincerity of the Christian, I would say to you, my professional brethren, who have done so much for me, "Itawambi"

A mere enumeration of what we have contributed to surgery, even were that possible during the hour assigned to the subject, might not prove the most profitable occupation of it; and moreover, while this may be the centennial of our national existence, it is not that of our profession; for, as is well known, the War of Independence left us an impoverished people, almost destitute as regards the sciences, certainly without any peculiar medical literature. Even the reputed father of American surgery was not admitted a house surgeon in St. George's Hospital, London, though a private pupil of the celebrated John Hunter

The active professional life which this address summed up had its beginning when Dr. Eve returned to his home city of Augusta. Fortunately his return coincided closely with the creation of the Medical College of Georgia, which opened in June of 1832. Dr. Eve was selected by the Medical College as professor of surgery and remained in this role until 1849. He conducted 17 consecu-

tive courses of lecture without missing a single class. It was during this period of time that he first began to receive distinction as an editor of note as well as performing for the first time at least 14 different surgical procedures, including the first successful hysterectomy. Prior to the date of this hysterectomy, there had been about 20 such procedures done and his was the first patient to live. This is a remarkable achievement for his relatively isolated environment.

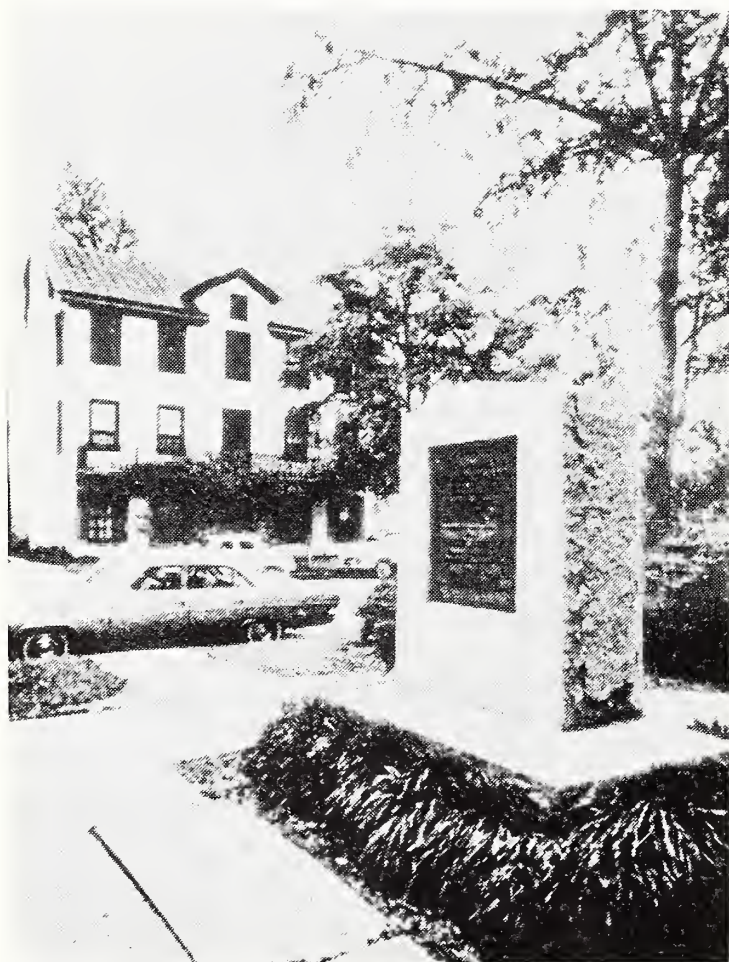
In 1849 Dr. Eve was selected as professor of surgery in the Medical Department of Louisville University. Here he succeeded the celebrated Samuel D. Gross. Dr. Eve filled the chair of surgery in 1849 but kept it for only one year. In March of 1850, he heard that Dr. Gross was not completely satisfied with his position in New York. Dr. Eve was not willing to interfere with Dr. Gross's return to Louisville, should this be a desirable solution to Dr. Gross's dissatisfaction. The Eve resignation was received with the utmost regret by the faculty of Louisville University. It was finally accepted because of the positive terms in which it was couched, though Dr. Eve was solicited by the unanimous vote of the trustees, the faculty, and the students to remain. His determination was to return to Augusta; however, in 1851 the Medical Department of the University of Nashville was organized, and the new department extended a most cordial invitation to Dr. Eve to accept the chair of surgery. On this stimulus, he moved to Nashville for the first time. He remained in this chair until forced from the city on the occupation of Nashville by Union troops. He was the surgeon-general for Tennessee in the Confederacy and fled Nashville the night following the announcement of the fall of Fort Donelson. The Medical Department of the University of Nashville went into a wartime hiatus which ended in 1865.

Dr. Eve returned to Nashville following his distinguished career with the CSA and again accepted his tutorial responsibilities at the Medical Department of the University of Nashville. In 1868 the death of Dr. Joseph Nash McDowell left vacant the chairmanship of the Department of Surgery at Missouri Medical College in St. Louis. It was Dr. Eve's belief that the vacancy in the department offered him a greater challenge.

St. Louis was a larger city than Nashville and offered more field for usefulness and for success. He moved to St. Louis at the age of 62 to fill the chairmanship of the Department of Surgery at Missouri Medical College, but was never happy there. He wrote to Dr. Martin in Nashville on Nov. 12, 1868, and said,

I have not been well a single day since I came here and am, if anything, worse today. I arrived with every expectation of making this my future home. I have not been disappointed in my reception and I see a large surgical practice awaits me. [Remember this was less than three years after he came back from the Confederate Army.] But I cannot drink the water and entertain serious apprehensions about the health of my family here. All the Eves have a tendency to diarrhea. I write then this early to let you know, that while I have not reached a positive decision of the question yet, the probabilities are that I will return to Nashville to reside. Thanks for the volume which came safe to hand yesterday.—Paul F. Eve.

The anxieties connected with his stay in St. Louis brought him back to Nashville. In 1870 he resigned his Missouri Medical College position and accepted the chair of surgery in the Medical



Monument erected in Augusta, Ga., by the Polish government in memory of Paul F. Eve.



Stamp issued in 1931 by the US government commemorating Dr. Eve's participation in the Polish War for Independence.

Department of the University of Nashville. He lectured to the classes of medicine at Vanderbilt University and at the University of Nashville, which then held joint sessions in the same hall. In 1877 there was some minor internecine strife in the faculty at Vanderbilt University, and Dr. Eve withdrew to aid in the support of a new school, the Nashville Medical College. This subsequently became the Medical Department of the University of Tennessee. His second course of lectures in this institution was interrupted by his death at 72 years of age.

His success as a teacher and the fame of his teaching is well shown from the records which are available to us. The Medical College of Georgia had, at the time of its organization in 1832, 28 students. By the conclusion of the 1849-1850 session, the last year in which Dr. Eve taught in that institution, enrollment had progressed to 195 students in each session. Similarly, the University of Nashville grew from 136 students in its first year of existence to 454 for the last session before the War Between the States. This was the largest class that ever assembled in any medical college in this country outside of New York and Philadelphia.

His career as a teacher was marked by numerous contributions to the surgical literature. He

was able to write most interestingly of his many military travels and of his experiences as a military surgeon, and he commented on the need for a journal of "Unsuccessful Cases in Surgery." Concerning this he said,

The prospectus of a medical journal designed to become the record of unsuccessful cases would we apprehend meet but with little encouragement. The novelty of such a proposition might indeed attract attention, but few could be induced to continue their support by subscription and still fewer by contribution to a periodical in which only unfavorable results in the practice of medicine and surgery were to be found. Still there is a moral implied in the above suggestion and we are required to be often reminded of the obligation to discharge our whole duty. Who is the faultless man who has not erred in the practice of medicine and surgery? We exercise a fearfully responsible calling and our

whole concern is to discharge faithfully our duty. The consequences belong to God. The community knows this fact, that we are not and cannot be held accountable for the result of a single dose of medicine or any operation whatever when prescribed or performed according to the acknowledged principles and practices of our profession.

The role of such a man in teaching medical students, as well as in the continuing education of physicians, is one which has continued in this community across the years. Teaching at the University of Georgia, University of Louisville, University of Nashville, Vanderbilt University, Medical College of Missouri, and the Medical College of Nashville, such wisdom can only survive across the ages as a hallmark to be emulated by all aspirants to proficiency in the field of medical education.

The Government has been in the hands of the people. To the people, therefore, and to the faith and able depositaries of their trust is the credit due. Had the people of the United States been educated in different principles, had they been less intelligent, less independent, or less virtuous, can it be believed that we should have maintained the same steady and consistent career or been blessed with the same success?

While, then, the constituent body retains its present sound and healthful state everything will be safe. They will choose competent and faithful representatives for every department. It is only when the people become ignorant and corrupt, when they degenerate into a populace, that they are incapable of exercising the sovereignty. Usurpation is then an easy attainment, and an usurper soon found. The people themselves become the willing instruments of their own debasement and ruin. Let us, then, look to the great cause, and endeavor to preserve it in full force.

Let us by all wise and constitutional measures promote intelligence among the people as the best means of preserving our liberties.

James Monroe
FIRST INAUGURAL ADDRESS
MARCH 4, 1817



THE NON-COMPLIANT PATIENT*

THOMAS FERGUSON, M.D.:

The patient under discussion is one whom I have been following in the outpatient clinic for approximately 4½ months. She is a 44-year-old black female who presented for elevation of high blood pressure, reported to range in the neighborhood of 180/130 to 210/160 mm Hg. She was a Gravida III, Para III, Ab 0 woman with onset of high blood pressure with her last pregnancy in 1967. She was asymptomatic except for occasional headaches. She had a positive family history for high blood pressure and stroke.

The blood pressure was 180/140 mm Hg. There were no positional changes in the blood pressure. There was Grade I hypertensive retinopathy without impairment of visual acuity. Examination of the heart was normal except for a slightly increased intensity of the aortic

determination of the serum and urinary electrolytes, renal functional studies, rapid sequence IVP, renogram, several 24-hour collections of urine for vanilmandelic acid (VMA), catecholamines, 17-hydroxysteroids and 17-ketosteroids, x-ray of the chest and electrocardiogram—all of which were normal. The assessment was essential hypertension.

Table 1 provides a summary of her course in the clinic and later in the hospital. The first clinic visit was for evaluation. She was instructed at this time about a diet containing 2 gm of sodium. On the second visit, she was begun on hydrochlorothiazide, 50 mg/day. On the third visit this was doubled and, in addition, methyldopa was begun. The blood pressure did not respond. By the fourth visit, the methyldopa was increased to maximum dosage and hydralazine added. On the fifth visit medical non-compliance was suspected, and she was advised to enter the hospital. She refused

Table 1

139123

Clinic Course:

Visit	#			BP	180/140 mm Hg.
	# 1	Evaluation and diet			
	# 2	Hydrochlorothiazide	50 mg q.d.		180/150
	# 3	+Hydrochlorothiazide +Methyldopa	100 mg q.d. 500 mg h.s.		180/140
	# 4	+Methyldopa +Hydralazine	500 mg q.i.d. 50 mg b.i.d.		160/130
	# 5	+Hydralazine	50 mg q.i.d.		180/140
	# 6	missed visit			
	# 7	D/C Methyldopa Propranolol			180/160
	# 8	+Propranolol	10 mg q.i.d. 20 mg q.i.d.		160/130
	# 9	+Propranolol	40 mg q.i.d.		160/130
	# 10	+Propranolol	50 mg q.i.d.		150/120
	# 11	+Guanethidine	10 mg q.d.		150/140
	# 12	+Guanethidine	25 mg q.d.		160/140
	# 13	+Guanethidine	50 mg q.d.		160/140
	# 14	+Guanethidine	100 mg q.d.		160/120
	# 15	Admitted for further w/u and Rx			160/120

Hospital Course:

Rx	2 gm Na diet and above meds	
Day 3	incapacitated 2° orthostatic dizziness	
Day 10	control of BP 130/90 on	HCT 100 mg q.d. Hydralazine 50 mg q.i.d. Propranolol 80 mg q.i.d. KCl 2 tsp q.d.
Follow up clinic visit		120/80

component of the second sound. No signs of failure were detected or abdominal bruits heard.

Laboratory studies in the clinic included urinalysis,

*City of Memphis Hospital Case No. 139123
Presented June 9, 1976

because of family problems and her inability to get someone to take care of her children.

She missed her next clinic visit, and two weeks later admission was again advised, but she again refused. Methyldopa was discontinued and propranolol begun.

The blood pressure at this time was 180/160 mm Hg. During the next four visits, propranolol was increased; on the tenth visit, a dosage of 200 mg/day was attained, in addition to maximum doses of hydralazine and hydrochlorothiazide. The pulse at this time was 90/min, and the suspicion of medical non-compliance was reinforced. Recommended admission to the hospital was again rejected.

On the 11th visit, guanethidine was started in gradually increasing doses until the 13th clinic visit, at which time examination showed no orthostatic change in blood pressure and a persistently rapid pulse. On the 15th clinic visit, the patient consented to hospitalization for further work-up and treatment.

Hospital management included a sodium restricted diet, maximum doses of guanethidine, and near maximal daily doses of propranolol, hydralazine, and hydrochlorothiazide. By the third hospital day the patient was incapacitated by orthostatic hypotension. A protocol of tapering medications was instituted. By the tenth hospital day, the blood pressure was controlled on hydrochlorothiazide, hydralazine, propranolol, and potassium chloride. She was instructed by a dietitian and repeatedly by her physicians regarding her medications.

On a follow-up visit one week after discharge from the hospital, the blood pressure was 120/80 mm Hg.

Discussion

STEPHEN T. MILLER, M.D.:

This case demonstrates a problem which is familiar to all of us: this frustrating encounter with individuals who keep showing up in our clinics but neglect to do what we recommend to them is a common occurrence in clinical medicine. Perhaps we should reflect on that frustration for a moment because the first question is, "What is our responsibility as physicians to such patients?" Non-compliance with actions which might promote health appears to be a prevalent trait of the human race. Many humans eat too much, smoke cigarettes, consume too much alcohol, neglect buckling their seat belts, and otherwise display behavior which is deleterious to their health. Therefore, it is not surprising that they do not take pills prescribed for them.

What should we do about it? Should we only care for the obedient and compliant patients and leave the remainder to their own fate? Obviously, I cannot outline the categorical limits of our responsibility, but it is clear to me that we have not discharged our responsibility as physicians when, after appropriate evaluation and recommendations, we do not do all in our power to ensure that the patient has the necessary information and behavioral guidance to follow our advice. I make this observation because it is easy to label a patient non-compliant and use that

label as an excuse for our further actions or inactions. Not all non-compliance is the patient's fault, although in this case it undoubtedly was.

Frequency and Causes

What can we do? Can we possibly identify those individuals who will not adhere to recommendations and devote special attention to them? That identification would greatly simplify our efforts. Summing up a large number of studies, the mean proportion of non-compliers in our patient population is 50%. It does not particularly matter what disease is involved. For example, one-half of anemic, pregnant women do not take their supplemental iron¹; one-half of ambulatory psychiatric patients do not take the medications prescribed for them.² This problem also transcends our society. In tropical countries, 50% of individuals do not take their antimalarial prophylaxis.³ With some conditions there appears to be a more favorable response. For example, 65% of diabetics take their insulin as prescribed, but 35% do not.⁴ Some conditions fare far worse. In a recent study of otitis media, only 7% of children received a 10-day course of antibiotics for the infection.⁵ To further dramatize the problem and illustrate its magnitude, when antacids are left at the bedside of patients hospitalized with a peptic ulcer and the nurse instructs the patients to take them and later returns to see what happened, only 42% of the prescribed doses are consumed.⁶

Unfortunately, we cannot identify non-compliant patients before they have the opportunity to manifest their shortcoming. The best indicator still remains the individual's track record. Intuitively we might expect that demographic characteristics would be helpful, but a large number of studies have indicated that these characteristics are not predictive of adherence to instructions.⁷ Except in earliest childhood, when compliance is obviously related to someone else, and in the elderly, age does not produce greater compliance with maturity. Race, and to the extent in this country that it reflects social and economic conditions, is not consistently related to compliance. Females, even though they visit physicians more frequently, do not take their medicines more often. With the exception of one end of the spectrum, the functionally illiterate, quite surprisingly the better educated patient is not the more compliant one. A college graduate will not take his pills with any

greater degree of consistency than a high school graduate, or the latter more than an eighth grade graduate. Also, occupation is not a predictor of compliance. A professional person is not consistently more compliant than a laborer. I do not know of any systematic studies of physicians, but there are numerous anecdotal accounts of physician non-compliance, and some of us may even have had some personal experiences. Income, duration of disease, and external fear do not seem to play a part. You cannot scare someone into taking medicine regularly.

Then what are the determining factors? A number of studies have revealed four determinants which are important (Table 2). The pa-

Table 2

Variables Related to Compliance

Professional-patient relationship
Continuity of care
Perceived seriousness of illness
Rationale of therapy

tient's relationship with the physician and continuity of care by the same physician are intuitively obvious and supported by data. I am going to consider in further detail the patient's perception of the seriousness of the illness and understanding of the efficacy of treatment. They are important because theoretically, we can do something to modify them. The question is whether the theory is supported by data.

Management

To support the theory, I will relate to you an important study which is relevant to all of us as therapists. Thomas Inui, M.D., was the chief resident on the medical service at the Johns Hopkins Hospital when he did a study in the general medical clinic of that institution.⁸ In 1972 the National High Blood Pressure Educational Program commissioned a national survey of the understanding of hypertension in the general population.⁹ A surprising deficiency of knowledge concerning hypertension was found in the general population. For example, only one-third of the population sampled knew that hypertension was high blood pressure; most individuals thought it was some sort of nervous disorder. Only two out of five knew the normal blood pressure for their age. Less than half knew an elevated blood pressure could exist without any kind of per-

ceived symptom. Inui concluded that if that were true in the general population, it must be true in the general medical clinic, and by educating the patients, it might be possible to develop a favorable outcome.

To inaugurate such an educational program, he sat down with one group of interns and residents, and conducted a tutorial. The patients of these physicians were the experimental group. There was another group of residents and interns who conducted business in their usual way, and their patients served as controls. The results are in Table 3. Sixty-eight percent of the control patients were aware of the actions of their medications. Less than two-thirds knew their diet or

Table 3

Results of Education of Hypertensive Patients by Physicians

	Control	Experimental
Knowledge of medications	68%	92%
Knowledge of diet	60%	90%
Aware of potential limitation	57%	98%
Aware of cardiac damage	68%	92%
Took 75% of pills	32%	61%
Blood pressure controlled	36%	69%

were aware of the potential limitations of their activity by hypertension or of potential cardiac damage. After the tutorials, the physicians in the experimental group made only a minor modification in treatment of their patients. On the average they increased the amount of time they spent educating their patients by two to three minutes at each visit. The brief session of patient education produced a measurable increase in their understanding of their disease. But more important is the impact on blood pressure control. In the usual operation of the clinic, that is in the control group, less than one-third of the patients took as much as 75% of their pills. After education, the number complying almost doubled. The proportion of persons having their blood pressure controlled increased from 36% to 69%. This resulted simply from interns and residents spending two to three minutes a visit informing their patients what their illness was, what the potential complications were, and why the medications were prescribed.

It is important to note that patient education of the type under consideration does not always require a physician as the teacher. A study done by a pharmacist in inner city Detroit¹⁰ investi-

gated hypertensive patients and found that in a selected population, only 17% of the dispensed pills were consumed. After an educational intervention, which consisted of an initial visit with the pharmacist of 30 minutes and of six minutes per visit thereafter, pills taken increased to 79% and blood pressure previously uncontrolled in the non-compliant group came under control.

Favorable results of this kind are easily disputed. At the end of six months, the educational program by pharmacists was terminated. Six months after termination, the patients were right back where they started. Small doses of education are effective, but they must be repeatedly applied. Also, professional intervention is necessary. In a study in hypertensive steel workers in Ontario,¹¹ the educational stimulus was an audiovisual demonstration plus a pamphlet written in laymen's language which patients could take home and read. In addition, a high school graduate trained in health education walked around the steel mill reminding the hypertensive patients to take their medications. It was found that, without the professional intervention, a compliance response failed to occur. That was perhaps predictable from information gathered by the national survey⁹ about where people get their information about their health. It is from physicians and clinics. Everyone does not accept our advice, but we are a far better source of information than anyone or anything else. We cannot depend on television, pamphlets, and employers to dispense information. It is the physician's responsibility.

I hope I have convinced you of the importance of educating each patient on each visit. If the data I have presented are accepted and if patient education is actively practiced, the proportion of compliant individuals will increase from one-half to two-thirds, but probably not to 100%.

Further Approaches to Promoting Compliance

The question remains, "What about the remaining non-compliant one-third?" What about the patient whom Dr. Ferguson presented? We do not have easy answers for managing those individuals, but I think it is clear that the problems presented by them are beyond conventional clinical approaches and we need some new ones. There are a number of studies in progress on "behavioral modification" in relation to hyper-

tension, some of them simple and some complex, to determine what effect it might have on compliance. These interventions can be as simple as the following: Assume you tell a patient to take an antihypertensive medication three times a day. Is it possible that if you tell them specifically to take their medication before each meal you will get a better response than if you only tell them to take it three times a day? We do not know the answers and we do not know the pharmacological implications of mixing pills with food, but the hypothesis is being tested to coordinate the taking of pills with environmental cues.

On a more sophisticated level, some ingenious techniques, such as medication packets and alarm clocks, have been developed.¹² We do not know the efficacy of these approaches, the cost effectiveness, or who is to pay for them. We also have not determined the ethics of trying to modify a patient's behavior. However, there are some individuals who want to stop smoking cigarettes or eating excessively but cannot. I think it is reasonable to consider that there are a number of individuals who would like to take their antihypertensive medication regularly but cannot remember. If we can develop reminders and bring in other disciplines to assist us, we may reduce that final one-third of non-compliant individuals to a smaller proportion.

Charles E. Kossmann, M.D., Editor

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Continued on page 260

SALIVARY GLAND SCAN

For two months, this 70-year-old man noted weakness on the left side of his face. There was no pain or tenderness. Palpation revealed a 1 cm nodule in the submandibular area near the angle of the jaw. There was weakness of muscles supplied by the submandibular and buccal branches of the facial nerve.

Thyroid studies, including a scan, revealed no abnormality. A preoperative salivary gland scan demonstrated the submandibular gland and duct and parotid gland and duct (Fig. 1). The tail of the parotid gland showed a very slight distortion and reduced technetium concentration (Fig. 2) when compared with the right parotid gland (Fig. 3). After oral stimulation with lemon juice, the parotid and submandibular glands promptly excreted the technetium into the region of the tongue (Fig. 4). At surgery, a 1.2 cm nodule overlying the left parotid was removed. This was fibro-fatty tissue with non-specific inflammation. A portion of the tail of the parotid gland was removed. It showed normal parotid tissue with some fibrous scarring.

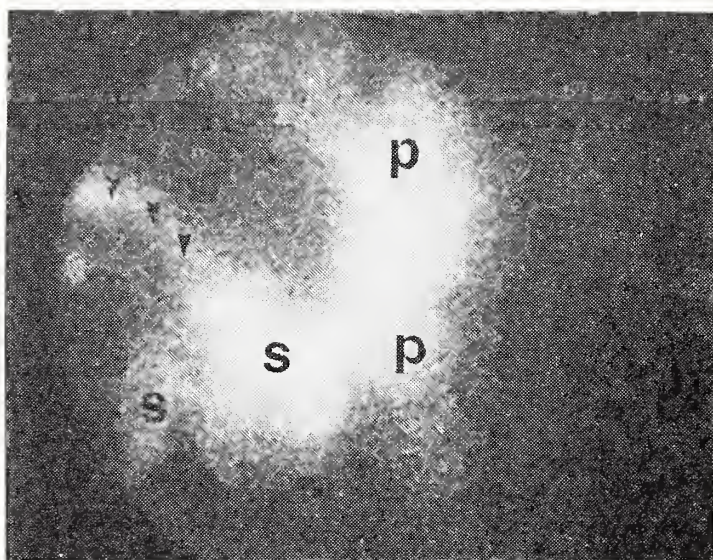


FIG. 1. Left side salivary gland scan, 10 minutes
P = parotid gland
S = submandibular gland
Arrows indicate ducts.

This case demonstrated good visualization of the parotid duct, submandibular duct, tail, head, and body of the parotid gland and indentations

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

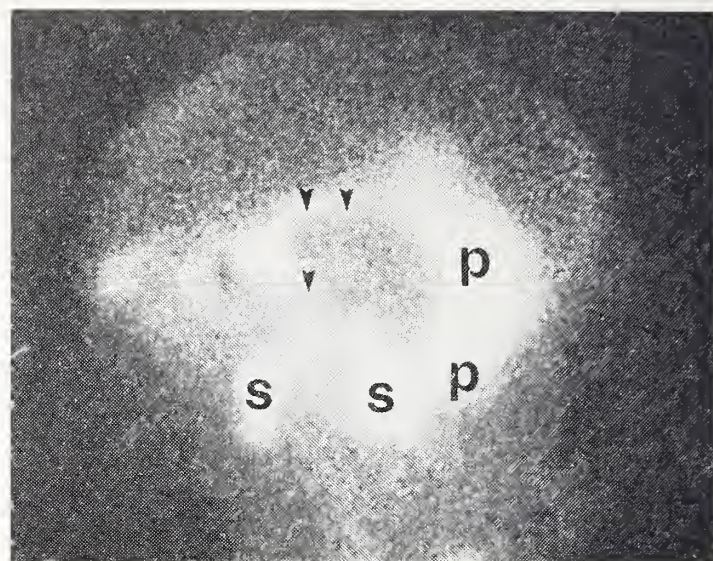


FIG. 2. Left side salivary gland scan, 15 minutes
P = parotid gland
S = submandibular gland
Arrows indicate ducts.

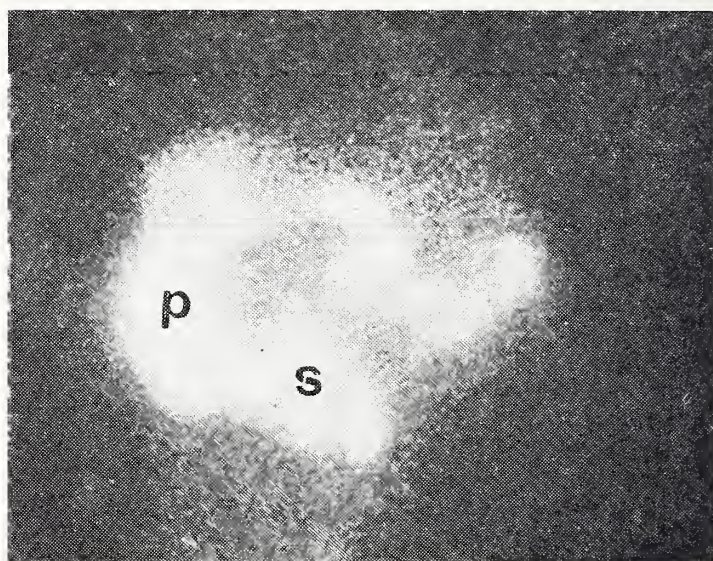


FIG. 3. Right side salivary gland, 20 minutes
P = parotid gland
S = submandibular gland

of the submandibular gland as well as discharge of isotope from the parotid and submandibular glands after oral stimulation. The inflammation noted in the surgical specimen was related to a parotitis the patient had many years ago before.

The quality of resolution seen in these studies would be impossible to obtain with the old scintillation cameras, but should now be possible with the newer 37 tube scintillation cameras. With this improvement in salivary gland scanning, renewed interest in the salivary gland scan will probably be seen. Indications for salivary gland scanning are:

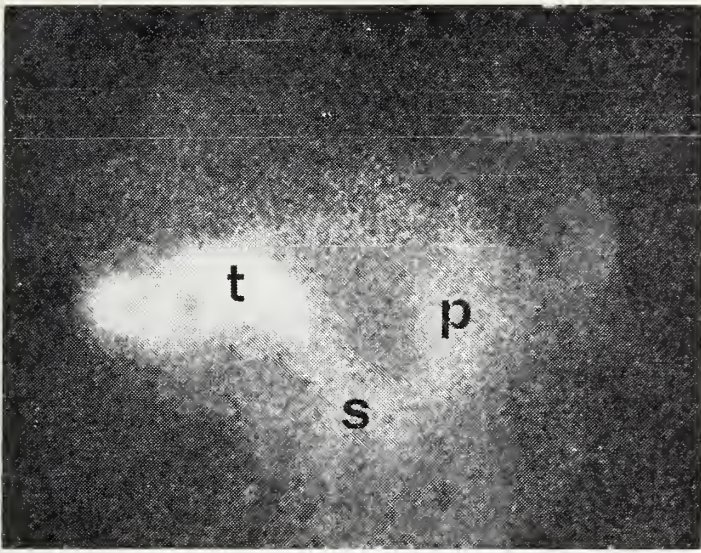


FIG. 4. Left side salivary gland after lemon juice

P = parotid gland

S = submandibular gland

T = tongue

1. Delineation of a palpable mass.

A. Is it inside or outside the salivary gland?

- B. If it is inside the gland, where is it located?
- C. Does it concentrate a great deal of radioactivity (Warthin's tumor)?
- D. Is it a cold nodule (almost any tumor can produce a cold nodule)?
2. Is there obstruction of the parotid or submandibular ducts?
3. Is there poor isotope concentration such as one might find in a Sjogren's syndrome?
4. If there is an inflammatory condition, does uptake and excretion improve with reduction of the inflammation?
5. Is there retained salivary gland tissue post-operatively?

Many of these questions should now be answered with the improved instrumentation currently available.

Robert L. Bell, M.D.
Director

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SERUM TRANSAMINASES IN PEDIATRICS

Transaminases are enzymes which are responsible for the transfer of an amino group of an amino acid to an alpha-keto analogue of another amino acid. They are widespread in animal tissues, plants, and microorganisms. Serum glutamic oxaloacetic transaminase (GOT; aspartate transaminase; AST) and glutamic pyruvic transaminase (GPT; alanine transaminase; ALT) determinations are commonly used in clinical medicine as diagnostic and management aids, particularly for hepatobiliary and cardiovascular diseases. GOT activity is found in heart, liver, skeletal muscle, and kidney, while GPT activity is found in liver, kidney, heart, and skeletal muscle in decreasing amounts, respectively.

Childhood diseases in which elevated transaminases are observed in serum include neonatal giant cell hepatitis (idiopathic and viral), congenital biliary atresia, neonatal hepatic necrosis, postnecrotic cirrhosis, Reye's syndrome, viral hepatitis, sickle cell disease (hepatocellular necrosis and biliary obstruction), infectious mononucleosis, alpha-1 anti-trypsin deficiency, and muscular dystrophy.

Because differentiation of hepatic and myocardial diseases by the clinical laboratory is uncommonly required in pediatrics, serum GOT (SGOT) determination is usually sufficient. However, pediatric myocardial diseases which may cause elevated SGOT activity include idiopathic intrauterine or neonatal myocardial infarction, penetrating or closed thoracic trauma, left coronary artery arising from the pulmonary artery, idiopathic arterial calcification, and enteroviral myocarditis. In such instances a serum GPT (SGPT) might be valuable, since SGPT tends to be minimally elevated in myocardial disease. Further, evidence of ischemic myocardial injury has been noted at necropsy in 24% to 75% of cases of congenital heart disease. It is reasonable to assume that elevation of SGOT activity might have been expected in some of these cases.

For transaminase values greater than 500 IU,

From the Departments of Pathology and Pediatrics, University of Tennessee Center for the Health Sciences, and Le Bonheur Children's Hospital, Memphis, TN 38103.

the SGOT/SGPT ratio is less than one in 90% of adult patients with acute viral hepatitis, in spite of the fact that hepatic GOT activity is roughly three times as great as GPT activity. The reason for this reversal of the ratio of transaminase activity within the hepatocyte is unknown, although canine studies have demonstrated slower clearance of GPT from serum. Similar ratio data from children is unavailable.

Conditions and medications which have been associated with an apparent increase in SGOT activity as determined by diverse techniques include para-aminosalicylic acid, ampicillin (IM), hetacillin (IM), cloxacillin (IM), ascorbic acid, hyperbilirubinemia, lipemia, bishydroxycoumarin, sulfathiazole, and erythromycin. Apparent elevations of SGPT activity have been seen with ampicillin (IM), barbiturate intoxication, bishydroxycoumarin, erythromycin, and lipemia. Decreased activity of both enzymes may be seen with severe malnutrition and with pyridoxine deficiency. Exercise has been associated with decreased SGPT values.

As with any laboratory procedure, normal values depend upon the accumulated experience of a given laboratory with a specific technique using normal and abnormal specimens. In addition, normal values in children often are age-variable. A selection of published normal serum transaminase values is listed in Table 1. Karmen units may be converted to International Units (IU) by multiplying by a factor of 0.48.

Table 1
Normal SGOT and SGPT values as related to age*

Age	SGOT	SGPT
Birth-6 mos	37-43 IU	32-35 IU
6 mos-1 yr	31-37 IU	31-36 IU
1 yr-5 yr	19-24 IU	19-23 IU
6 yr-15 yr	9-12 IU	11-15 IU
Adult	5-40 IU	7-35 IU

* 30°; Kinetic method (Centrifichem System, Union Carbide Corp., Rye, N.Y.)

Serum specimens may be held at refrigerator temperature for two to three weeks for SGOT determinations and for one week for SGPT determinations unless there is heavy bacterial contamination of the specimens. Hemolyzed specimens should be discarded, since erythrocytes contain transaminase activity.

W. M. Gooch, III, M.D. and C. Sotelo-Avila, M.D.

HISTORY

A 31-year-old mentally retarded woman was admitted to the hospital for evaluation of a heart murmur. She had a history of increased shortness of breath for the preceding three or four days, had been slightly febrile. On admission she had a striking physical appearance with short stature, prominent epicanthal folds, shortened and somewhat inward curving fifth fingers. A simian line is noted across the left palm and she was noted to have Brushfield's spots on her iris. On examination she had a grade IV harsh systolic murmur at the left sternal border fourth intercostal space with associated thrill in this area. She had a prominent pulmonic closure sound with a shock. An S_3 gallop was audible in the left sternal border. Fixed splitting of the second sound could not be appreciated. Auscultation revealed a few coarse rales at the right base posteriorly.

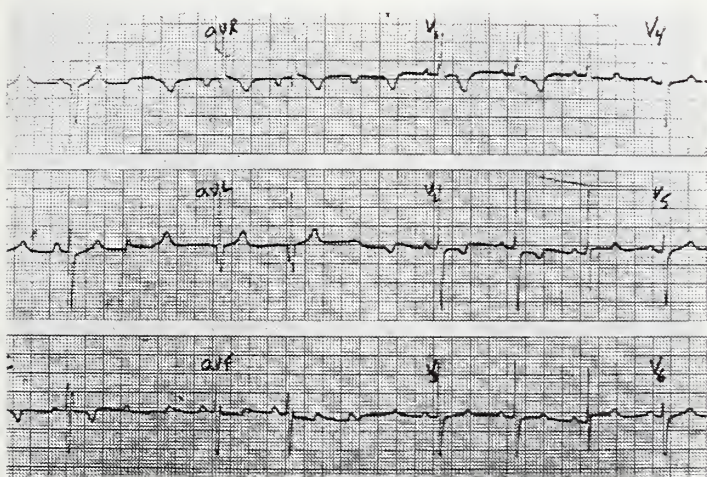


FIG. 1

Discussion

A PA film of the chest showed an infiltrate at the right base. There was prominent pulmonary vasculature. The aortic knob was small. An electrocardiogram obtained at that time (Fig. 1) shows normal sinus rhythm at the rate of 73 per minute. The PR interval is normal at 0.18 seconds. There are prominent P waves in standard lead 2 which are nearly $2\frac{1}{2}$ mm in height suggesting right atrial enlargement. The diminutive Q wave present in I and AVL, in association with tall R wave in I and AVL immediately following this, document the presence of counterclockwise rotation of the early QRS forces. Note that the R wave in AVL is taller than the R wave in I. Note also that the R wave in II is of brief duration and is followed by a very deep S wave.

From the Department of Cardiology, Saint Thomas Hospital, Nashville, TN 37205.

These leftward counterclockwise forces are diagnostic of anterior hemiblock. In a patient with Down's syndrome this finding is pathognomonic of an endocardial cushion defect. The very prominent S wave in standard lead I caused by marked rightward late forces are secondary to right ventricular enlargement. Note that the forces are strongly anterior with prominent R wave in V1 and V2. Note also, that the T is inverted in V1 and V2. The systolic murmur suggests that this patient had an endocardial cushion defect with communication at the ventricular level and probably at the atrial level also. Because of the patient's mental retardation, cardiac catheterization for further documentation was not carried out.

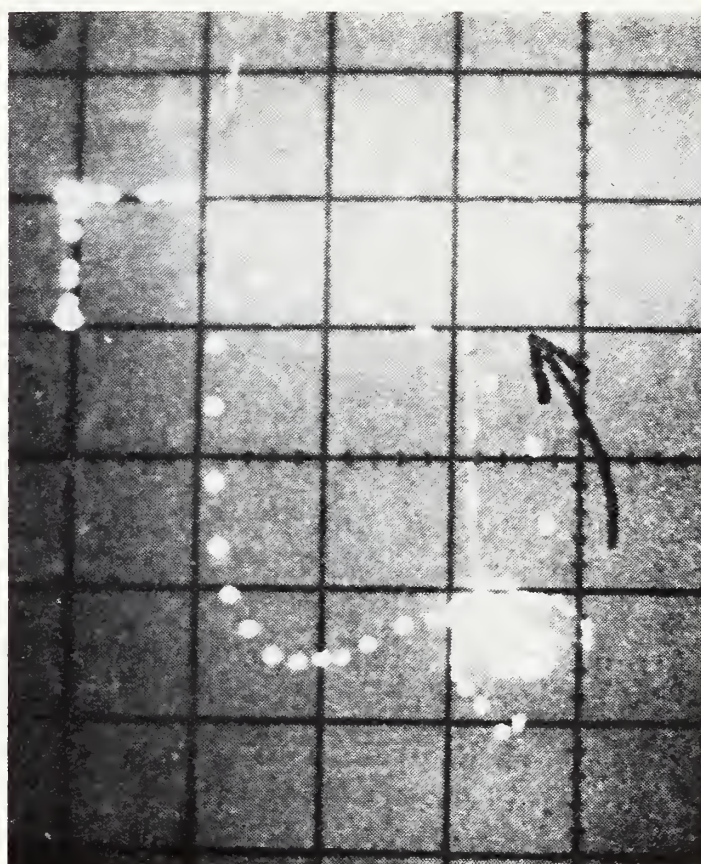


FIG. 2

Figure 2 is a frontal plane vectorcardiogram showing counterclockwise rotation of QRS forces. Note the initial small rightward forces accounting for the diminutive Q wave in I and AVL followed by prominent left superior forces responsible for the tall R wave in AVL and I prior to the rightward terminal forces which caused the prominent S wave in standard lead I.

Final electrocardiographic diagnosis: Left anterior hemiblock compatible with endocardial cushion defect and right ventricular enlargement.

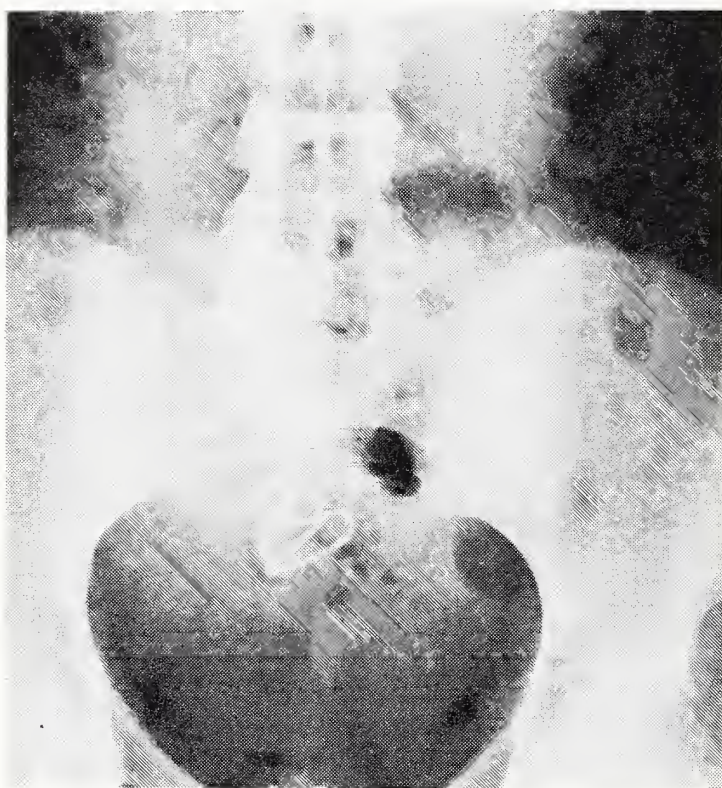
W. Barton Campbell, M.D.
Co-Director

TMA X-ray of the month

The anteroposterior pelvic radiographs below (A and B) are of two different patients. Each patient has had a Lippe's loop inserted into the uterine cavity. In which patient is the IUD positioned correctly and in which patient has the IUD perforated the uterus?

Discussion

Perforation of the uterus by the Lippe's loop has been reported in 1 per 1,000 to 1 per 2,500 cases.^{1,2} Perforation occurs at the time of the insertion of the IUD into the uterine cavity and is visually asymptomatic and unrecognized.³ Complications of uterine perforation by IUDs include small bowel obstruction, abdominal pain and post-insertion pregnancy.¹



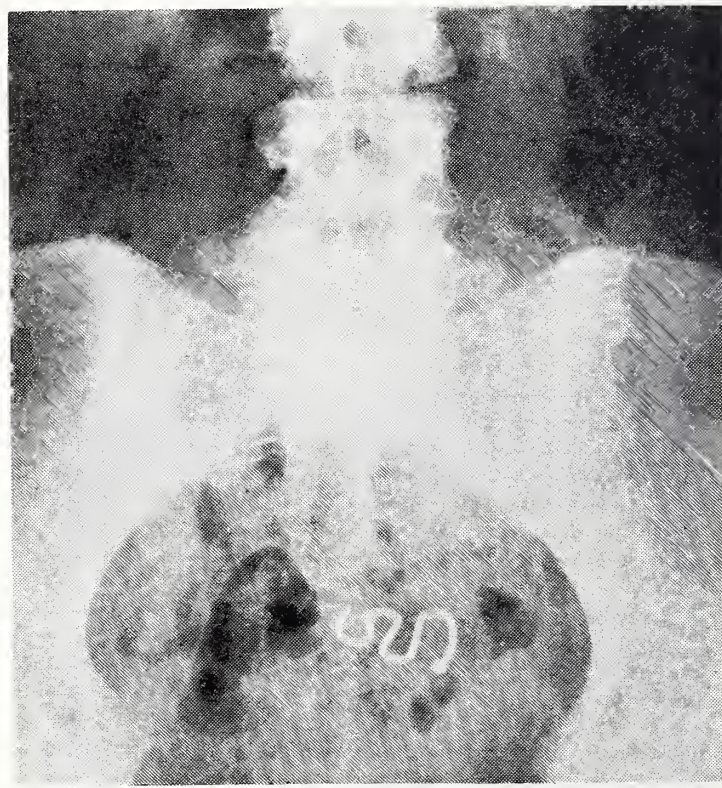
PATIENT A

The anterior posterior radiograph of the pelvis can be used to make the diagnosis at uterine perforation by a Lippe's loop. This is made possible by the fact that once the Lippe's loop perforates the uterus and escapes the confines of the uterine cavity it uncoils. This uncoiling of the loop is seen on the radiograph as a widening of the distance between bulbous tip and second curve of the loop as seen in patient B. Eisenberg described this as the widened loop sign of Lippe's

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

loop perforations.⁴ He noted that when the Lippe's loop is in its inserter, it is completely straight. As it is ejected from the inserter onto a flat surface, the loop assumes its natural double S curve and the distance between the bulbous tip and the second loop is 1 cm. When the loop is correctly positioned in the uterine cavity, as in patient A, the loops are compressed together and the distance between the bulbous tip and the second loop decreases to 2 or 3 mm. However, once the loop has perforated into the peritoneal cavity, it is no longer compressed by the confines of the uterus, and it assumes the shape it had when it was lying free. Thus the widened Lippe's loop should be taken as presumptive evidence of perforation, and hysterosalpingography or ultrasound should be performed to definitely document this.

A. James Gerlock, Jr., M.D.



PATIENT B

Answer: Patient A has the IUD correctly positioned, while the IUD in patient B has perforated the uterus.

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TENNESSEE'S VOLUNTARY FLUORIDATION PROGRAM:

A Milestone in Preventive Dentistry

Fluoridation of community water supplies in Tennessee has been successfully implemented and maintained with an emphasis on education rather than legislative mandate. This philosophy of education and the voluntary process has had strong support by the Tennessee Department of Public Health (TDPH) and the Tennessee Dental Association (TDA) since the program's beginning in 1951. At the end of the 1975-1976 fiscal year, approximately 3 million persons, or more than 92% of the 3.4 million Tennesseans who drink water from a public water system, are drinking fluoridated water, placing Tennessee in the top six to ten states in a nationwide ranking.¹

Experience with the community fluoridation program in Tennessee during the first 12 years revealed a pressing need for financial assistance in certain small communities. A pilot program was initiated in this state, and administered through the TDPH, by which 50% of the fluoridation project's cost would be provided by state funding and the remaining portions would be provided locally.² In order to qualify for such assistance, a community of less than 10,000 population must meet state requirements for an approved public water system. To date, 57 small communities have fluoridated (or are in the process) under this program.

In 1971 the community fluoridation program seemed to have reached a "leveling off" period. Recognizing the value of fluoridation as a major public health measure, the TDPH and the TDA explored several possibilities for future direction, one of which was mandatory fluoridation. This alternative was rejected with the feeling that the small percentage of communities still without fluoridation (affecting 600,000 persons) could better be reached through additional education and financial incentive.

The past success of the state's 50% financial assistance program influenced the initiation of a new contract with HEW's Division of Dentistry offering up to 100% funding for qualifying communities. Included in this contract was a pro-

vision for staffing the TDPH's Division of Dental Health Services with a sanitary engineer to revive the community fluoridation program. The engineer was further charged with upgrading the monitoring and surveillance of public water systems already fluoridated. The TDPH currently operates under both the 50% state funding contract and an up to 100% assistance program similar to the HEW contract which has expired. By demonstrating financial need, meeting requirements for an approved public water system, or showing the capability for maintenance of a safe fluoridation program, a community may qualify for one of the assistance programs.

According to a sampling of public water systems in Tennessee by the Environmental Protection Agency in 1970, about one-half of fluoridated systems were adjusting their fluoride content below the optimal level of one part per million.³ An intensive educational effort followed during which the TDPH conducted courses for water plant operators throughout the state, made personal contacts for consultation and follow-up, and made surveillance equipment available to regional dental consultants. In 1974 a survey by Shannon and Wescott of 629 fluoridated communities in 12 southern states showed Tennessee with an improvement in number of water systems maintaining the optimal fluoride level.⁴ The Division of Dental Health Services (TDPH) conducted a random sampling of public water systems in 1976 and found that approximately two-thirds of those are now fluoridating at the optimal level. Much effort is being directed toward upgrading the maintenance of the remaining one-third of these systems.

Through prevention, by means of fluoridation, we can realize a tremendous cost savings in expenditures for corrective treatment. The Children's Incremental Dental Health Project in southeastern Tennessee and northern Georgia (1968-1974) indicated that per capita expenditures for corrective dental treatment average 50% less in those communities where public water supplies are fluoridated. Other studies across the nation indicate similar findings.

Much of the success of Tennessee's voluntary fluoridation program must be attributed to the

support and active assistance of private dental and medical practitioners across the state. Private dental practitioners are often regarded by the community as being totally representative of dentistry in their area; therefore, their opinions and actions count heavily in guiding the community's dental health program. Private medical practitioners, on the other hand, often outnumber the local dental component and may be more widely known in many communities. In the latter instance, particularly, local medical society strength and support become vital to the dental public health effort. Of course, dental health cannot be isolated from general public health when caring for the "whole person."

Every community in Tennessee with a population of 10,000 or more is now fluoridated; this represents some 243 communities. The other side of the coin shows 8% of our population, about 336,000 persons, drinking from non-fluoridated public water supplies.

The two major tasks now are (1) to ensure that all fluoridated water systems in Tennessee reach and maintain the optimal level of fluoridation; and (2) to provide the education and financial incentive needed by the remaining non-fluoridated communities in order that they may become participants in this vitally important public health preventive measure. Both private and public health physicians are needed to help make these goals a reality.

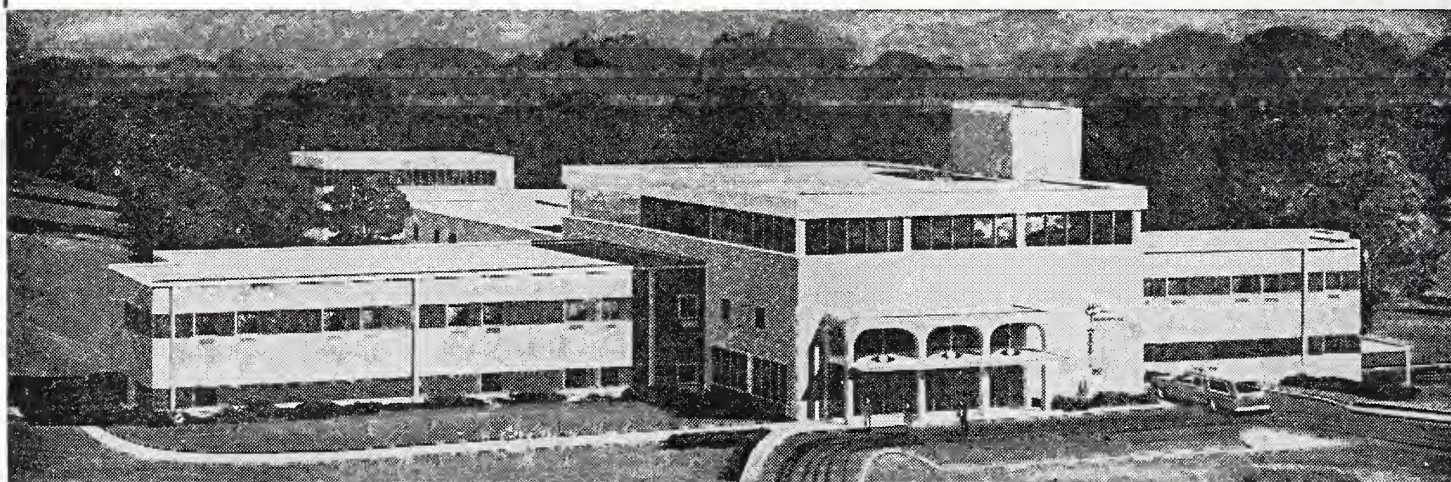
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Tennessee department of mental health & mental retardation

THE COMMUNITY MENTAL HEALTH CENTER:

An Effective Approach to Mental Health Care

It became apparent in the 1940s that mental illness was a major problem in our country and that the existing system of mental health services delivery was inadequate to meet the needs of those individuals who required care. Psychiatric hospitals were over-crowded and under-staffed; psychiatrists in private practice were practically unheard of in many parts of the nation. A design for a new system for the provision of mental health services was not to emerge, however, until 1963. Since that time, through the efforts of certain concerned and supportive presidents and Congresses, state legislatures, federal, state, and local governments, mental health and other professionals, and private citizens, the community mental health center has come into existence and is proving daily that it is an effective approach to mental health care.

In the late 1960s and early 1970s, the Tennessee Department of Mental Health and Mental Retardation initiated plans which will eventually insure that every resident of the state who may require mental health services, will have access to a full range of services within his own community. The state was divided into 30 geographic areas, and the responsibility for the development of a comprehensive community mental health center in each area was assigned, in the majority of cases, to a private, non-profit corporation, whose board of directors is composed of citizens who represent all elements of the community. Currently 16 centers, whose service areas include over 2,223,500 residents of Tennessee, have achieved comprehensive status, and all of the remaining 14 are working toward that goal.

What is a comprehensive community mental health center? If we define it in terms of the services which it must provide or insure the availability of, through affiliative agreements, we would say that the comprehensive community mental health center offers outpatient, inpatient, 24-hour emergency, partial hospitalization, transitional half-way house, and consultation and ed-

ucation services to residents of its service area, regardless of age (children and youth and the elderly), creed, race, color, sex, natural origin, duration of residence, ability to pay, or type of mental or emotional disorder (including the alcohol and drug abuser and the chronically mentally ill).

It is required that a broad range of treatment modalities be available within each of the service elements; for example, outpatient services should include (in addition to individual therapy) group therapy, family therapy, chemotherapy, marital therapy, etc. Furthermore, the services of the center and of its affiliates must be coordinated and organized in such a manner as to insure that an individual client may move from one service to another as his progress, or lack of progress, dictates.

The comprehensive community mental health center may also be defined in terms of its accessibility to actual or potential users of its services. Locating the center near the majority of people in the service area, considering the availability of (or offering) transportation, providing for outreach clinics in remote areas, initiating a home-visit program, and offering services during evenings, nights, and weekends are some of the mechanisms employed by most centers to insure that the mental health needs of their assigned area may be identified and met. Financial accessibility is promoted by basing fees which are charged for services on the individual client's ability to pay. Also, attention is given to the removal of procedural, physical, and psychological barriers which would deter the use of services.

The comprehensiveness of the services of the center may be depicted by the variety of mental health professionals and para-professionals who bring their collective skills to bear on the needs of the community and of individual clients. The staff of the center must be qualified by education, training, and experience to provide programs of specialized services to certain groups: children and youth, adults, the elderly, alcoholics and alcohol abusers, drug addicts, and drug abusers, and clients who have been referred by the courts.

Additionally, the clinician often is required to function as a consultant and educator as services are provided to individuals and agencies in the community who are involved with mental health services: health professionals, schools, courts, law enforcement and correctional agencies, members of the clergy, human services delivery systems, etc. In assuming the role of a consultant, the clinician does not become directly involved with a client, but assists other care-givers to acquire skills and employ treatment techniques which will enable them to provide mental health services.

Having sufficiently delineated the roles and responsibilities of community mental health centers, it is important that we examine the effect that the centers' programs have had on mental health services on a national level and in our state.

In passing the Community Mental Health Centers Amendments of 1975, Title VI of P.L. 94-63, the Congress of the United States found "that (1) community mental health care is the most effective and human form of care for a majority of mentally ill individuals; (2) the federally funded community mental health centers have had a major impact on the improvement of mental health by (a) fostering coordination and cooperation between various agencies responsible for mental health care which in turn has resulted in a decrease in overlapping services and more efficient utilization of available resources; (b) bringing comprehensive community mental health care to all in need in a specific geographic area regardless of ability to pay, and (c) developing a system of care which insures continuity of care for all patients, and thus are a national resource to which all Americans should enjoy access."

U.T. Medical Grand Rounds

Continued from page 251

et al: The effect of clinical pharmacy services on patients with essential hypertension. *Circulation* 48:1104-1111, 1973.

Dr. Ed Kelty of the National Institute of Mental Health reports in *Community Mental Health Review* (vol 1, no 5, 1976) that "community mental health centers are now providing almost one quarter of all mental health care treatment episodes in the United States" while receiving "only 4.2% of the total expenditures for direct mental health care."

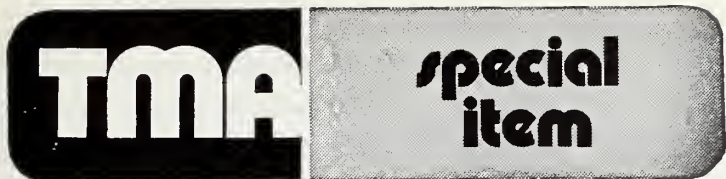
The situation in Tennessee at present is that community mental health services are being provided to over 38,000 active clients through centers or clinics which are located in 77 of the state's 95 counties. As a consequence, the problems of over-crowding and under-staffing in the state's regional mental health institutes are being ameliorated through census reduction, as the centers are able to assume more of the responsibility for early detection of mental illness or emotional disturbance and early intervention, for referring the client to the state facility only when it is necessary and appropriate, for working with the hospitalized client, his family, and the institute staff in planning for the client's early return to the community, and for providing continuing treatment in the community for individuals who have been discharged from the institutes.

The community mental health center program in Tennessee, as well as nationally, has proven to be an effective approach to mental health care. It has been demonstrated that both the quality and quantity of mental health services, which are available in our state, have improved significantly as centers have been established and as they have developed programs designed to meet the specific needs of their communities. We anticipate continued progress as more centers move toward and achieve comprehensive status.

Malita Bratcher, R.N.
Director, Community Mental
Health Services

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PRINCIPLES OF MEDICINE

ROBERT MATZ, M.D.*

As we enter the last quarter of the twentieth century, the practice of medicine is being increasingly defined all too specifically by an avalanche of institutional, city, state, and Federal regulations. It was thus deemed appropriate to codify some of the rules and principles by which the profession has survived and operated up to the present time. This effort is still preliminary and incomplete and owes a major debt to Maurice B. Strauss, M.D., whose *Familiar Medical Quotations* (Boston, Little Brown and Co., 1968) should be a required reference work for all physicians. I must add that I have reversed Dr. Strauss' suggestion and followed Anatole France: "When a thing has been said and well said, have no scruple: take it and copy it. Give references? Why should you? Either your readers know where you have taken the passage and the precaution is needless, or they do not know and you humiliate them." Or to put it in simpler terms, plagiarism is the basis of civilization.

Principles

1. Loeb's laws of medicine:

- A. If what you're doing is working, keep doing it.
- B. If what you're doing is not working, stop doing it.
- C. If you don't know what to do, don't do anything.
- D. Above all, never let a surgeon get your patient.

2. Sutton's Law. William Dock, M.D., on ward rounds when he discovered that every test had been done except the appropriate one, suggested that the student follow Sutton's Law, which he defined as follows: Willy Sutton, the bank robber, was asked why he always robbed banks rather than hotel clerks, filling stations, or other easy marks. He replied, "Because that's where the money is."

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3. Medications:

- A. Life is not a drug-dependent state.
- B. Patients can get well without antibiotics.

4. Homer Smith's Law. The function of the heart is to pump blood to the kidneys.

5. Murphy's Laws:

- A. If it is absolutely impossible for anything to go wrong, it will anyway. Trying to correct it will only make matters worse.
- B. If anything can go wrong, it will.
- C. When anything goes wrong, it does so all at once.
- D. Any error that can creep in, will. It will always be in the direction that will do the most harm.
- E. When left to themselves, things go from bad to worse.
- F. If two things can go wrong, the worst one will happen.
- G. If something goes wrong, it will be at the most inconvenient time.

6. If everything seems to be going well, you have overlooked something.

7. If everything is going badly, increased efforts will only make things worse.

8. Under carefully controlled conditions, machines and organisms behave as they please.

9. Parkinson's First Law. Work expands to fill the time available for its completion.

10. The Peter Principle. In a hierarchy, every employee tends to rise to his level of incompetence.

The Peter Corollary. In time, every post tends to be occupied by an employee who is incompetent to carry out his duties. Thus: Work is accomplished by those employees who have not yet reached their level of incompetence.

11. Gordon's Law. If a research project is not worth doing at all, it is not worth doing well.

12. Pardee's Law. There is an inverse relationship between the uniqueness of an observation and the number of investigators who report it simultaneously.

13. Kunin's Law. Garbage times garbage equals garbage squared (referring to a series of poorly done tests).

14. Phineas P. Phineagle's Law. The more complicated one makes a treatment, the more hopelessly will it become botched.

15. Rumble's Rule. No hospital staff physician is totally worthless; he can always be used as a horrible example.

16. Hawkin's Law for Surgeons. The lesser the indication, the greater the complication.

17. Shumway's Law. Bleeding always stops.

18. Law of Medical Hysteria. Inappropriate medical activity is directly proportional to the gravity of the patient's illness and inversely proportional to the likelihood of real or lasting therapeutic benefit.

19. Lord Brock's Dictum. If a patient has had an upper abdominal illness or upper abdominal operation and then has an illness associated with anomalous features at the base of one side of the chest, one should diagnose a subphrenic abscess and go on diagnosing it until it has been excluded.

20. White's Law. When a patient is beyond fifty years of age, one should make at least two diagnoses.

21. Merskey's Rules:

A. Do a silly test and you get a silly answer.

B. In the hospital more deaths occur in bed than out of bed, so get the patient out of bed!

C. Any drug can do anything!

22. Danowski's Law. There are no brittle diabetics; only brittle physicians.

23. It takes two years to learn when to go into the abdomen and twenty years to learn when to stay out.

24. A drug is that substance which when injected into a rat will produce a scientific report.

25. Weinstein's Principle. (on the cost of treatments for possible cases of subacute bacterial endocarditis) "It's still cheaper than the cheapest funeral."

26. William Dock, M.D., on the use of penicillin to treat acute bacterial endocarditis in a patient with penicillin allergy: "Better red than dead."

27. Luria's Law. Three antibiotics equal one fungal infection.

28. There is no subject, however complex, which if studied with patience and intelligence, will not become more complex.

29. Furthermore:

A. Common things occur commonly.

B. The race may not always be to the swift nor the battle to the strong, but it's a good idea to bet that way.

C. When you hear hoofbeats think of horses, not zebras.

D. Place your bets on uncommon manifestations of common conditions rather than common manifestations of uncommon conditions.

30. Littmann's Rule (for the treatment of congestive heart failure): The longer it took for failure to develop, the more time I take to return the patient toward normal.

31. A committee is a group of persons who having found a common objective meet periodically to change it.

32. Dock (on obstetrics): The proper training for obstetrics consists of nine months of internal medicine, about twenty minutes of obstetrics for multiparous births or two hours for primiparas, a dash of surgery for the occasional cesarean, and forty minutes of pediatrics.

33. Spodick (on clinical experience and the failure of growth of wisdom): "One is reminded of Napoleon's mules—they had seen 100 campaigns, but they were still mules."

34. Only God can make a random selection.

35. Barach's Rule. An alcoholic is a person who drinks more than his own physician.

36. Patient's Rule (concerning his symptoms): It's not a matter of life or death—it's much more important than that.

37. Lord Cohen's Aphorism. The feasibility of an operation is not the best indication for its performance.

38. Ambiguous questions lead inevitably to ambiguous results. The computer specialists have a phrase for the problem: "Garbage in, garbage out."

39. Hart's Inverse Care Law. The availability of good medical care tends to vary inversely with the need for it in the population.

40. The Chief's Basic Rules:

A. The Chief is right.

B. In the impossible hypothesis that a subordinate may be right, rule A becomes immediately operative.

41. Fenagle's Laws on Information:

A. The information you have is not what you want.

B. The information you want is not what you need.

C. The information you need is not what you can obtain.

42. The Golden Rule of Academic Advancement. Do unto others as they would do unto you; only do it first.

43. Myth of the Immaculate Perception. The

belief that we, at least, are uniquely discerning in the measurements we make.

44. If it looks easy, it is tough. If it looks tough, it's damn near impossible.

45. When working toward the solution to a problem, it always helps to know the answer.

46. Minor deviations from a sought answer may be compensated for by the "credibility factor": that quantity which when multiplied by, divided by, added to, or subtracted from the answer you get, gives the answer you know you should have gotten.

47. In any given operation, the source of the error will never be determined if more than one person is involved.

48. Most constants are variable.

49. To err is human, but to really mess things up requires a computer.

50. No amount of genius can overcome a pre-occupation with detail.

51. Good intentions:

A. Good intentions randomize behavior and are far more difficult to cope with than malicious behavior.

B. If good intentions are combined with stupidity, it is impossible to outthink them.

52. If something has been stated in such a way that nobody can misunderstand, someone will.

53. Democratic principles:

A. Biologic phenomena cannot be determined in a democratic manner.

B. The decision for or against a given mode of therapy cannot be made by plebiscite.

54. The more questionable the indications for

requesting a laboratory test, the greater the problems the answer will cause.

55. Nature always sides with the hidden flaw in the system.

56. Every psychoneurotic ultimately dies of organic disease.

57. Curing:

A. The leaving of an order never cured a patient.

B. No patient was ever cured by a laboratory determination.

58. A good heart and kidneys can surmount all but the most willfully incompetent fluid regimen.

59. Beware of the physician who is great at getting out of trouble.

60. A physician's life is a constant and losing battle against obsolescence.

61. The problem with calling in a consultant is that you may feel obligated to take his advice.

62. If you cannot figure out a patient's problem, perhaps someone else can.

63. If a particular treatment cannot help a patient, the fact that nothing else can does not constitute an indication for that therapy.

64. You cannot diagnose a condition if you do not think of it.

65. The quality of survival is as much the physician's responsibility as the facts of survival.

66. Textbooks of a previous generation were as large as the textbooks of today, but, contained a different body of misinformation.

67. New equipment and new procedures may improve medical care, but seldom decrease the cost.

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C. GORDON PEERMAN, JR.

The Year Ahead

During the past year it has been my privilege to serve as President of the Tennessee Medical Association. Besides the honor, this office has provided for my personal enrichment by enabling me to meet so many of the doctors in this state. I continue to be impressed by the dedication of individual physicians to the health of their patients and the welfare of society.

**president's
page**

The overriding concern of the profession this year has been the medical liability crisis. Steps have been taken to form our own medical liability insurance company and to implement the tort changes enacted by the Legislature. The insurance company is off to a commendable start but will require careful and fiscally sound management. Further changes and adjustments will be needed in legislation, particularly with regard to the Medical Malpractice Review Boards. In all it has been a good start and there are signs that the liability problem may no longer be increasing.

In the near future we need to address ourselves to the question of National Health Insurance. It is necessary for us to provide responsible leadership as the national program evolves. We need to be imaginative leaders and not merely observers as when the Medicare and Medicaid laws were enacted.

Our professionalism is being attacked by the Federal Trade Commission in its suit regarding advertising by doctors. It is necessary for us to protect our ethical standards which are both in the public's and the profession's best interest.

Fortunately for us we have a politically active and knowledgeable leader in our new President, David H. Turner, M.D., of Chattanooga. He is introduced in this issue of the JOURNAL, so I will not repeat all of his achievements. Besides his participation in medical matters, he has been active in the legislative process and the Republican Party. He has served as chairman of the Hamilton County Republican Party and as alternate delegate to the Republican National Convention. With this background, he is particularly qualified to lead the Association in a time when the increased political action is in the interest of the Association and the people of Tennessee whom we serve. I solicit for him the same consideration and assistance which you have given me during the past year.

Very sincerely,

C. Gordon Peerman, Jr., M.D.

PRESIDENT

THE NEW PRESIDENT



DAVID H. TURNER, M.D.
CHATTANOOGA

DAVID H. TURNER, M.D.

89th President—Tennessee Medical Association

THE YEAR 1977-78 promises to be a productive one for the Tennessee Medical Association. The TMA possesses in its new President a man of skill, courage, experience, and foresight. Here is one of medicine's most enthusiastic workers in our state and the AMA. He is well qualified to hold the highest office of our association.

David H. Turner, M.D., is a physician who has participated actively in medical and legislative matters, which uniquely qualifies him to serve as President. He is a man of principle and conviction. He weighs alternatives and makes decisions based on fact.

Born in Jasper, Tennessee, January 12, 1927, Dr. Turner received his early education in Marion County Schools in Tennessee, and graduated from Baylor School in Chattanooga. He attended the University of Virginia and Vanderbilt University, and graduated from the University of Tennessee Medical School in 1952. After completing internship at Baroness Erlanger Hospital in Chattanooga in 1953, he was in general practice at Jasper, Tennessee from 1954 through 1957. He entered a residency in ophthalmology at Emory University in Atlanta in 1957, which continued through 1960. He has practiced ophthalmology in Chattanooga since that time.

His service in medical societies has been extensive. His memberships include local, state, and national organizations. Dr. Turner is a member of the Academy of Ophthalmology and Otolaryngology, American Association of Ophthalmology, and a Fellow in the American College of Surgeons. He has served as president for the Tennessee Academy of Ophthalmology, 1972-73. He was secretary-treasurer of his specialty society in 1967-70. Dr. Turner's professional and leadership abilities are evidenced by the number of posts held in these medical societies. Since 1973 Dr. Turner has served as an alternate delegate from Tennessee in the American Medical Association's House of Delegates. He has fought against political medicine and has worked unceasingly for the benefit of his patients and the profession of which he is a member. He is dedicated to the highest principles of medicine and has the ability to cope with the issues with which medicine is faced.

Your next President has also been active in community affairs. He has served as chairman of the Hamilton County Republican Party, 1974-75, and an alternate delegate to the Republican National Convention in 1976. Dr. Turner was chairman of the Board of the Greater Chattanooga Christian Services and Children's Home, 1975-76. Among his other service activities are terms as president of the Chattanooga Christian Medical Society, 1974-75, and chairman of the Tennessee Valley Medical Assembly in 1969.

He is married to the former Mary Shook of Jasper, Tennessee. They have four children, a daughter, Mrs. Kathy Lucas; two sons, David H., Jr., and Tom, both of whom are students at the University of Alabama. Their third son, Paul, is a student at Baylor School in Chattanooga. Dr. Turner's hobbies are all types of skiing, hunting, fishing, and politics.

The Tennessee Medical Association is indeed fortunate to have as its new President a physician of Dr. Turner's experience and dedication. He will serve the TMA and its members effectively.

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APRIL, 1977

This year of 1977 marks the centennial of the death of Paul Fitzsimmons Eve, and as a salute to this remarkable man the JOURNAL carries a series of papers presented last year as a memorial to him by the Nashville Surgical Society as a part of Nashville's celebration of our nation's Bicentennial. Nothing could have been more fitting, for in the year of Dr. Eve's birth, 1806, the nation was still very young, and if, as many of us think, the nation was born with the ratification of the Constitution, it was only 18 years old.

Though he was born in Georgia, he claimed Nashville as his home, and through him and his sons, the lives of many Tennessee physicians were enriched. Indirectly, that includes us all.

J.B.T.

The New Doctors

Angry young people have always been with us; we were young and angry once. But they have been angrier than I remember being, and since the generations of angry young doctors are only five years long, I have lived through a few of them. And irate young doctors have rebelled and have grown up, whereupon they joined the older practicing physicians and were replaced by a new group of angry young physicians, who like civilizations piled on top of one another, were themselves replaced by still another group of indignant young doctors.

From what I have read, these people lost their anger when they lost their youth. It is more than likely that they acquired wisdom with age; certainly, information came their way. Is to be young to be immature? I do not belittle them, I look at the record.

Frank Cole, M.D., Editor
Nebraska Medical Journal

For 15 or 20 years now I have been reading about angry young men, occasionally making contact, and even now and then even running afoul of one. Some of them have been doctors. Dr. Coles' editorial set my mind to retracing a well worn path, and unless memory fails me, I have to take issue with him. Since he does not use the editorial we, I assume he means "we were *all* young and angry once." We were sure enough all young once. But I can't for the life of me remember being angry in the sense of a prolonged slow burn, nor do I remember it in any of my contemporaries.

Over the years I have periodically tried to discover the reasons for this. Has time simply dulled the memory, or were we ignorant of the issues, or perhaps just lacking in compassion? Or were the issues less important or less clearly defined?

editorials

Paul Fitzsimmons Eve, M.D.

Tennessee has numbered among its citizens many illustrious physicians, among them several presidents of the American Medical Association and men of outstanding academic and professional accomplishments. None has surpassed Paul Fitzsimmons Eve, recognized as one of the foremost surgeons of the nineteenth century; professor of surgery at a number of medical schools, among them both the University of Tennessee and Vanderbilt; soldier; president of the AMA; and the father of two illustrious sons, Paul F., II and Duncan.

I entered college at a time when the world was beginning to fall apart. Hitler was elbowing his way around Europe, but generally we were optimistic. Pursuit of a medical career kept me and my classmates pretty well occupied. When we weren't studying we were recuperating in various college-type diversions, and had only a passing interest in other things.

Pearl Harbor interrupted a weekend respite from cadaver dissection, and my class—or most of it—was the first to make the circuit in three years. The heat was on, because we were of a generation which, unlike some later ones, believed that in order to be a doctor (in a word, to graduate from medical school) one needed to absorb a certain amount—large—of medical information. We sometimes got angry when the situation called for it. But we were not what you could have called angry young men.

I spent my senior year working as an intern, with just enough spare time to study and get engaged. I got an M.D. degree, a commission, and a wife all in the same day and in that order. Because there were too few interns during the war, during my internship of nine months I rotated with a senior medical student. There was not even time to learn to know my wife. Sometimes I got angry about that, but mostly I was too tired. The patients had to come first. It was, after all, what I had set out to do. It never occurred to any of us to strike for better hours (there was no one to replace us) or better pay (we didn't get *any*—we didn't know we were supposed to).

After an overseas tour of duty, I came back to the wife I had been with so little, a two-year-old child I had seen only twice, and a surgical residency. Making rounds before eight o'clock surgery, which lasted all day, working up patients and more rounds when that was done, and getting home "beat" every other night left no time for being angry—only for trying to get to know my family. By the time I began a pathology residency two years later, I was nearly 30 years old and "over the hill."

Perhaps to be young is indeed to be immature, although to be immature is not necessarily to be young. In thinking back to those days I'm sure we were not really any more or less mature than the young men of later times. Our immaturity showed up in other ways. I empathize with them in their anger. But we expected to be busy. Hard work was assumed to be a part of becoming a

doctor. Nobody ever promised us—or them—a rose garden.

Like Dr. Cole, I do not belittle them. Nor do I weep for us. I too just look at the record.

J.B.T.

Public Health, American Style

Six feet six and three hundred pounds is a good guess, tanned and crew cut, pale green shirt open at the neck—the picture of health. Except that the belt holding up his white pants was swung too low by an ample "pot." He was calm and assured as he went through the buffet line after a couple of Bloody Marys and heaped his plate with good things—twice. Winter-time in Florida, "an' the livin' is easy."

His copper bracelet flashed as he puffed his after dinner "cigarillo," (which, incidentally, he inhaled). No arthritis or lung cancer for him!

As any fool could plainly see, he was protecting his health.

J.B.T.

Caveat Emptor

It has long been widely recognized—by long, I mean from ancient times—that if you wish to bring up a child to be resourceful and productive, it is best done by guidance, supplemented by resources, and by support when necessary. In short, you give him his head, and if he makes a mistake now and then, well, "nobody's perfect, and we learn by our mistakes." Intervention is appropriate only to prevent serious injury. This method is instinctive in animals and in so-called "primitive" man. Short term, it may make a mess. The emphasis is on long-term results.

Several years ago there was a TV commercial whose punch line went, "Mother, please, I'd rather do it myself." In this philosophy you see a job that needs doing and you do it, and if anyone gets in the way, too bad for him. It's results that count—tangible results. Unlike the preceding philosophy, the emphasis is on the short term. It is pragmatic, which translates "the end justifies the means." It is the "American Way." It is not new, and it was inherited. It is the way of Western Civilization. And it is destructive. It has marked our dealings with every less advanced individual and nation, from the Indians and Eskimos to the black slaves to the ghettos to "foreign aid." "After all, they're only children." Well—many a child has been reduced

to a blubbing mass of neuroses by such treatment.

Nowhere has the contrast been more vividly portrayed than in an account in the *Atlantic Monthly* of relief efforts following the Guatemalan earthquake last summer. World Neighbors, a relief organization based in Oklahoma City, has been working in the area for ten years teaching agricultural methods to the *campesinos*, and after the earthquake set about teaching them to construct earthquake-proof houses, using materials salvaged from their wrecked homes. Oxfam-America, a Boston-based subsidiary of Oxfam, a British relief agency, offered similar help. Using the each-one-teach-one method, those taught spread the methods throughout the area.

USAID and CARE, however, went in and over the protest that the debris of homes contained many items dear to their owners, even bodies of their loved ones, bulldozed away the wreckage, and quickly erected new homes with metal roofs and wooden frames. To the protest that housing was not as serious a problem as their crops, which were ripe and needed harvesting, the answer was that the *campesinos* really did not know what their greatest need was—CARE was better able to decide, and decided the quickly erected shelters in which the *campesinos* were living were unsatisfactory. So they built houses.

Of course, progress in the areas in which World Neighbors operates has been painfully slow, but the crops were harvested, and the *campesinos* themselves set building priorities. Construction has been carried out as a community operation, with World Neighbors and Oxfam providing whatever materials the community decided was necessary. The *campesinos* in the CARE area are better housed but less satisfied and less able to withstand new misfortune.

In 1932 the "New Deal" promised a chicken in every pot and a car in every garage. A generation grew up expecting that as a right, regardless of merit. It is how we treat our welfare recipients, whose number is growing rapidly. So, why work?

Benjamin Franklin said the life expectancy of a democracy, as indicated by history, is 200 years, the time it takes for a populace to find out they can vote themselves a living without working for it, and ultimately to destroy the economy and bankrupt the country.

Not content to keep our self-destruction at home, we are determined to export it, and mod-

ern communications and technology have furnished us the means.

Caveat emptor.

J.B.T.



AUERBACH, STEWART H., age 66. Died Feb., 21, 1977. Graduate of University of Georgia Medical School. Member of Chattanooga-Hamilton County Medical Society.

HICKEY, JOHN M., JR., age 51. Died Feb., 2, 1977. Graduate of University of Tennessee School of Medicine. Member of Sevier County Medical Society.

LEE, WALTER JEROME, age 67. Died Feb., 23, 1977. Graduate of Vanderbilt Medical School. Former member of Knoxville Academy of Medicine.

PYLE, W. WALTER, SR., age 68. Died March 15, 1977. Graduate of Vanderbilt University School of Medicine. Member of Williamson County Medical Society.

WALKER, J. O., age 89. Died Feb., 22, 1977. Graduate of Vanderbilt Medical School. Member of Williamson County Medical Society.

WOOD, ROBERT BENTON, age 80. Died Feb., 23, 1977. Graduate of Vanderbilt Medical School. Member of Knoxville Academy of Medicine.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY

N. W. Howard, M.D., Maryville
John J. Ingram, III, M.D., Maryville

GILES COUNTY MEDICAL SOCIETY

Manrin Rains, M.D., Pulaski

HAMBLÉN COUNTY MEDICAL SOCIETY

Sung J. Chung, M.D., Morristown
Robert H. Donald, M.D., Morristown

KNOXVILLE ACADEMY OF MEDICINE

Morris D. Campbell, M.D., Knoxville
Christopher W. Norwood, M.D., Knoxville

McMINN COUNTY MEDICAL SOCIETY

Roger Fulmer, M.D., Athens

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

David S. Bard, M.D., Memphis
James A. Campbell, M.D., Memphis
Raža Ali Dilawari, M.D., Memphis

Ronald K. Grossman, M.D., Memphis
Kelly Patterson, M.D., Memphis
Stephen M. Shiffman, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

Henry A. Cohen, M.D., Nashville
Doug Un Hong, M.D., Nashville
David Scott Jones, M.D., Nashville
Willem K. Rivenburg, M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

David G. Heald, M.D., Oak Ridge
Robert G. Howard, M.D., Oak Ridge
Thomas Jenkins, M.D., Oak Ridge
Lee A. Smalley, M.D., Oak Ridge

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

James H. Carmack, Jr., M.D., Kingsport
Clifford C. Heindel, M.D., Kingsport
Wayne P. Jessee, M.D., Kingsport
William L. Russell, M.D., Kingsport
Hugh Sullivan, M.D., Kingsport
Sudie Wike, M.D., Bristol

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

Ian Smith, M.D., Johnson City

WHITE COUNTY MEDICAL SOCIETY

Joel Johnson, Jr., M.D., Sparta
Billy C. Nesbett, M.D., Sparta

programs and news of medical societies

Chattanooga-Hamilton County Medical Society

The Chattanooga-Hamilton County Medical Society, Inc., held its annual banquet on Jan. 25, 1977. The program agenda included remarks by the outgoing president, Don J. Russell, M.D.; recognition of past presidents; presentation of awards; memorial observance for deceased members; and introduction of the incoming president, Jessee E. Adams, M.D., and TMA president-elect, David H. Turner, M.D.

Nashville Academy of Medicine

Medical Society Services, Inc. has been formed to assume the unrelated business activities of the Nashville Academy of Medicine. As a wholly owned subsidiary of the Academy, MSS is a "for profit" corporation organized to provide a number of services to physicians, including the current printing and medical placement services, auto leasing and travel programs, and other businesses as may be necessary. The Board is elected annually by the Academy Board of Directors.

national news

THIS MONTH IN WASHINGTON (From the AMA's Office in Washington, D.C.) Cost Containment Plan Proposed

The Carter Administration has fired the first torpedo in its opening battle against escalating health care costs by asking Congress to approve a "permanent hospital cost containment system" that would cover all hospital operations, private as well as governmental.

Recommended in the revised budget prepared by the Administration is a limit of about 9% on increases in reimbursement for operating costs per admission for each hospital for the fiscal year that starts Oct. 1.

Other features of the plan "to contain the continued rapid and disturbing rise in the cost of health care" included (1) waiver for states with acceptable hospital rate review programs; (2) separate controls on hospital outpatient departments, to encourage alternatives to inpatient care; (3) federal programs to encourage additional cost containment activities such as second opinion before surgery, pre-admission review for non-emergency hospital care, etc.; (4) monitoring for federal compliance, primarily using data already reported by hospitals for other programs, such as Medicare and Medicaid. Hospitals found in violation of reimbursement ceilings in any year could "repay" excesses by reducing charges or reimbursement increases in future years. Civil and criminal penalties would be included to combat fraud and abuse.

Under the proposal, the Health Education and Welfare Department Secretary would appoint a National Advisory Committee "of broad representation" to help determine future trends in spending for hospital care.

The program would be directed by HEW and would begin with a directive from Congress to establish limits on annual rates of increase in hospital reimbursement from all payors, beginning in fiscal year 1978, after consultation with the health industry and the public. The program itself would be administered in large part by the hospitals and private third party payors, according to HEW.

The plan is to evolve a more permanent cost containment program later. This plan would remain in effect "until absorbed by reimbursement provisions of a comprehensive national health insurance plan."

Savings of such a program were estimated to be about \$1 billion the first year, rising to \$5.5 billion in 1981.

The cost containment plan, which hasn't been fully worked out yet, will be submitted to Congress shortly for legislative approval, following meetings with such interested outside organizations as the American Hospital Association, the American Medical Association and Blue Cross, HEW Secretary Joseph Califano told reporters at the HEW budget

briefing. Other organizations notified to meet with HEW included the Health Insurance Association of America and the Federation of American Hospitals.

Despite the sweeping scope of the proposal, covering private expenditures as well as those under federal programs, Califano denied the plan represented a return to the wage-price freeze system of several years ago. He insisted the new plan was a different animal.

Asked why physician fees were not covered, the HEW Secretary said his department is taking "one step at a time." Califano said "we will be looking at that to see what should be done." There has not been enough time to move in this area with a proposal that could work and that would be fair to the people involved, he said.

The hospital cap is no cinch to clear Congress which has been leery in recent years of wage-price freeze plans and which last year refused even to consider President Ford's recommendation for caps on Medicare reimbursement increases for physicians and hospitals. A key factor could be the position of organized labor which is vigorously opposed to federal wage-price restraints. In addition, health care lawmakers have been considering their own proposals to curb the costs of Medicare-Medicaid, including a prospective reimbursement plan for hospitals.

A ceiling on hospital cost increases is "an essential prerequisite to a future national health insurance program," said Califano. . . . "The cost containment program represents the first step in making national health insurance financially feasible."

Under the plan, no hospital could increase its overall level of charges by more than the negotiated and federally sanctioned ceiling.

Califano said that if hospitals raise charges without economic justification before the program goes into effect "it may be necessary for the legislation to have sufficiently retroactive impact to nullify the benefits of such improper conduct."

John Alexander McMahon, president of the American Hospital Association, immediately declared that any program that sets an arbitrary limit on one segment of the economy while ignoring the rest is "inequitable, unworkable and may well be counterproductive."

Asserting the flat opposition of the AHA to the proposal, McMahon said a cost containment plan must take into account wage and price increases beyond the control of hospitals as well as the individual circumstances of each institution.

Recent statistics show that food and fuel prices are rising faster than those for health care, according to the AHA president. "Hospital charges have gone up as a direct response to the public's need for access to quality health care," he said.

The Federation of American Hospitals called the plan "unrealistic and unfair," John A. Bradley, FAH president said, "The goal is laudable but legislation imposing controls on prices without controls on wages and supplies is unrealistic and unfair. The

proposal is a retread of President Nixon's Phase IV control program and it is inconsistent with President Carter's policy against wage-price controls as well as his desire to reduce the growth of government."

Bradley said an arbitrary cap on reimbursement "would be a government directive to hospitals to sacrifice the quality of care."

He added: "It is disappointing that government has not addressed the causes of hospital inflation, particularly the malpractice problem. Under an arbitrary cap, a hospital could find itself in the ludicrous position of having to restrict the number of tests a physician may order."

Military Medical School to Close

The Carter Administration has announced plans to write off the military medical school as a \$50 million mistake.

Defense Secretary Harold Brown said: "The University of Health Sciences is to be closed, its current students placed elsewhere in scholarship programs and its facilities put to other use. Physician needs of the military services can be satisfied more economically over the long run by direct recruitment. The 1978 budget can be reduced by \$14 million."

The surprise decision came as the military medical school was midway through its first year of operation with 32 students, and construction of a building was well along on the grounds of the Bethesda Naval Medical Center near Washington, D.C.

The school has been opposed by the AMA since Congress considered the proposal in 1972. In the interim it also has come under severe attack from various study commissions and lawmakers as an inordinately expensive method of producing relatively few physicians for the armed services.

Congress may move to reverse the Administration's decision although the prime mover for the school—former Rep. F. Edward Hebert (D-La.), chairman of the House Armed Services Committee—is no longer in Congress. There is strong backing for the school on both committees, but it has not been tested to date by a forceful presidential move to kill the facility.

The defense announcement was part of a series of policy proposals contained in President Carter's revised budget for fiscal 1978.

NHI Cost Estimated

The dilemma facing the Carter Administration on national health insurance was bluntly stated by the Congressional Budget Office in its annual report. A plan fully financed by taxes, as Labor proposes, would use most of the money available for new programs "and would most likely require compensating reductions in other federal programs or tax increases above current policy levels." The Budget Office, which helps guide and determine Congress' spending and legislative plans, put the

1982 cost of such an NHI plan at a minimum of \$108 billion.

Alice Rivlin, director of the Budget Office which functions in relation to Congress much as the Office of Management and Budget functions in relation to the Executive branch, said a strong economy could leave room for new federal programs adding up to an additional \$50 billion of spending a year over the next several years. However, a wholly tax-financed NHI plan would swallow this and more. If no cost-sharing devices were featured such a plan—as urged by organized Labor—“could add from \$168 billion to \$200 billion to federal health expenditure by fiscal year 1982,” said the Budget Office report. In contrast, the report continued, “a compulsory employment-based, premium-financed plan with cost-sharing (such as the AMA proposal) might increase federal spending by as little as \$15 to \$20 billion in 1982.”

New Physician Extender Plan Announced

The government is moving on two fronts to encourage the use of physician extenders (PE's) in rural areas.

The Social Security Administration has launched an experimental program to reimburse physicians for “independent” medical services provided Medicare beneficiaries by physician extenders. Previous policy had been to reimburse physicians for PE Medicare Part B services only those “incident to” a physician's services and performed under the direct supervision of the physician. The new policy will permit payment for the independent services of physician's assistants, nurse practitioners, medex and similar non-physician health care providers. The reimbursement will be made only to a physician extender's employer, not to the PE directly.

The new Social Security policy was announced shortly before Congress opened hearings on legislation with strong backing in House and Senate to require Medicare reimbursement for qualified PE programs in rural areas without the restriction of direct physician supervision. Although the four major bills up for consideration do not call for direct payment to PEs, they differ in reimbursement policies with some allowing reimbursement to rural clinics and others requiring that reimbursement be channeled only through the responsible physician.

Knotty medical ethical and policy questions will be aired at the hearings by the House Ways and Means Subcommittee on Health, with the issue of professional liability heading the list. On an even broader front, the lawmakers must consider limitations on what services can be provided by the PEs, without stepping into the province of physicians. The amount of supervision and responsibility resting on the physician for the services of PEs will be a key issue. The reimbursement procedure is involved in all of these questions.

Practices that wish to be considered for enrollment in the experiment, or wish to receive further information regarding the experiment, should call collect to the University of Southern California, Di-

vision of Research in Medical Education, (Social Security contractor) at 213/221-2147 from 9:00 a.m. through 4:00 p.m., California time. All such queries must be made by May 1, 1977.

The government noted there are more than 7,000 formally trained PEs. “Whether this manpower resource continues to grow, or even continues to exist, depends in part upon federal reimbursement policies. The effect of such policy can only be magnified by the introduction of national health insurance.”

New Restrictions on FMGs Postponed

The State and Justice Departments, heeding the plight of hard-pressed hospitals, have agreed to a one-year waiver of new restrictions on admissions of “exchange visitor” foreign medical graduates. The waiver was requested by the HEW. Congress had signalled its agreement with the relaxation of requirements in the health manpower bill approved last year.

Hospitals had complained that the new restrictions, if implemented, would have slashed staffs of hospitals dependent on FMGs. The law's requirement that residence in this country is limited to two years with a third year on approval was not waived. Since more than half of FMG residents are on immigrant status rather than exchange visitors, hospitals fear FMG staffs will be depleted anyway.

The AHA, AMA, and many other medical groups had argued against the law's clamps on FMGs, contending that hardships would result and that the increasing supply of domestic physicians over time would end hospital reliance on FMGs.

Sen. Edward Kennedy (D-Mass.), who was instrumental in securing passage for the controversial restrictions on FMGs, and Rep. Paul Rogers (D-Fla.), chairman of the House Commerce Health Subcommittee, have written a joint letter to the State and Justice Departments urging the government next year to submit a plan for eventual phasing-out of “ill-trained” foreign physicians.

medical news in tennessee

UT Medical School Dean to Resign

The dean of the University of Tennessee College of Medicine, Charles B. McCall, M.D., will resign this summer to head a new medical school at Oral Roberts University in Tulsa, Okla.

Dr. McCall said that he has an opportunity to develop a private medical school from the ground up in a background of religious commitment and scientific-technical excellence.

UTCHS Announces Staff Appointments

The UT Center for Health Sciences has announced that Amoz I. Chernoff, M.D., has been

appointed the associate vice-chancellor for academic affairs of the UTCHS, Knoxville and Robert D. Lange, M.D., has succeeded Dr. Chernoff as director of the UT Memorial Research Center.

Dr. Chernoff, serving as scientific director of the Cystic Fibrosis Foundation while on sabbatical leave from the Center, joined the UT faculty in 1958 and assumed the directorship in 1964. He received his training at Yale University and was later associated with Washington University and Duke School of Medicine. Dr. Chernoff is certified by the American Board of Internal Medicine and is a Fellow of the American College of Physicians.

Dr. Lange came to UTMRC in 1964 and has served as research professor, assistant director of research, professor of medicine for the UTCHS in Knoxville, and acting director. His early training was at Macalester College in St. Paul and Washington University School of Medicine in St. Louis. He is noted internationally for his work on blood disease research. He is on the editorial board of *Experimental Hematology*.

personal news

R. A. CALANDRUCCIO, M.D., of Memphis has been elected president of the American Academy of Orthopedic Surgeons.

The following physicians have been elected Fellows of the American Academy of Orthopedic Surgeons: CHARLES A. GOUFFON, M.D., and DONALD E. MITCHELL, M.D., of Knoxville; THOMAS M. WEBSTER, M.D., of Greeneville.

JACK CHESNEY, M.D., of Knoxville has been elected president of Knox Children's Foundation.

ROBERT HALL, M.D., of Knoxville has been elected chief of staff of Baptist Hospital.

W. WALTER PYLE, M.D., of Franklin received a plaque of appreciation from the board of trustees and medical staff of Williamson County Hospital for his outstanding devotion to the medical field and his undying loyalty to the Franklin community.

A. C. ROLAN, M.D., of Bristol has been installed chief of staff of Bristol Memorial Hospital.

JOSEPH WILLOUGHBY, M.D., of Franklin has been named chairman of the board of directors of Harpeth Academy, private elementary school.

ROBERT H. WOOD, M.D., of Crossville has been elected a Fellow of the American Academy of Family Practice.

announcements

NATIONAL

1977

- Apr. 23-28 American Pediatric Society, Chalfonte-Haddon, Atlanta
- Apr. 25-30 American Academy of Neurology, Atlanta Hilton, Atlanta
- Apr. 29-May 1 American Trauma Society
- May 4-5 National EMS Manpower Symposium, Hyatt Regency Hotel, San Francisco
- May 8-11 American Association of Plastic Surgeons, Drake Hotel, Chicago
- May 9-12 American College of Obstetricians and Gynecologists, Chicago
- May 10-12 American Laryngological, Rhinological and Otolological Society; Sheraton Boston, Boston
- May 15-18 American Thoracic Society, Hilton Hotel, San Francisco
- May 16-17 American Society for Clinical Oncology, Denver Hilton, Denver
- May 18-21 American Association for Cancer Research, Denver Hilton, Denver
- May 25-28 American College of Sports Medicine, Marriott, Chicago
- May 29-June 3 American Association on Mental Deficiency, Fairmont, New Orleans
- May 30-June 1 American Ophthalmological Society, The Homestead, Hot Springs, Virginia
- May 31-June 2 Society of Neurological Surgeons, Rochester, Minnesota
- June 5-7 American Diabetes Association, Stouffer's Riverfront Inn, St. Louis
- June 5-9 National Intravenous Therapy Association, Marriott Hotel, New Orleans
- June 18-23 American Medical Association, Fairmont, San Francisco
- June 20-22 American Neurological Association, Palmer House, Chicago
- June 28-July 4 International College of Surgeons, U.S. Section, New York

STATE

- May 19 Middle Tennessee Medical Association, Goodlark Hospital, Dickson



continuing education opportunities

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Avenue, Nashville, Tennessee 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman can plan an individualized program of one-to-four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Anesthesiology	Bradley E. Smith, M.D.
Medicine	Grant W. Liddle, M.D.
Allergy & Immunology	Samuel Marney, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Endocrinology	David Rabin, M.D.; David N. Orth, M.D.
Diabetes	Oscar B. Crofford, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Oncology	Robert Oldham, M.D.

Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Orthopaedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Surgery	
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neil, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.
Cancer Chemotherapy	Vernon H. Reynolds, M.D.

ELIGIBILITY: All licensed physicians are eligible.

ADMINISTRATIVE FEE: \$200.00 per week.

CREDIT: American Medical Association Physician's Recognition Award and American Academy of Family Physician's Continuing Education accreditation.

APPLICATION: For further information and application, contact:

Paul E. Slaton, M.D., Director, Continuing Education,
305 Medical Arts Building, Nashville, TN 37212, Tel.
(615) 322-2716.

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE Continuing Medical Education Schedule 1977

Apr. 28	Annual Frank H. Luton Lecture in Psychiatry, Marc Hollender, M.D.
April 29	What's New in Obstetrics for Nurses?, Mary Freese, R.N.; Frank Boehm, M.D.
May 14	International Medicine, Vanderbilt University Medical Alumni Reunion
May 19-20	Postgraduate Course in Allergy, Vanderbilt University; University of Tennessee, Memphis; University of Mississippi, Philip Lieberman, M.D.; Samuel Marney, M.D.
May 25-26	Sixteenth Annual Seminar in Psychiatry, Frank Luton, M.D.
June 20, 21, 22	National Symposium on Impedance Screening in Children, Bill Wilkerson Hearing & Speech Center, Fred Bass, Ph.D.; Charles Bluestone, M.D.; Jerome Klein, M.D.; Earl Harford, Ph.D.

- Aug.-Sept. Internal Medicine Intensive Review (11 sessions), Paul E. Slaton, M.D.
- September Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.
- September Annual Wm. F. Orr Lectureship in Psychiatry, Marc Hollender, M.D.
- Oct. 17-22 Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.
- December What's New in Obstetrics for Physicians?, Frank H. Boehm, M.D.

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

THE UNIVERSITY OF TENNESSEE COLLEGE OF MEDICINE Continuing Education Courses 1977

- April 25 Diagnosis and Management of Common Skin Diseases
- April 28-29 Leigh Buring Conference, Memphis
- May 19-20 Allergic Diseases for Generalists
- May 23-27 Intensive Review of Anesthesiology, Memphis
- May 25-28 Basic Clinical Electrocardiography, Paris Landing Inn (Pickwick Lake)

Address all communications to: Division of Continuing Education and Conferences, UTCHS, 800 Madison Ave., Memphis, TN 38163.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER Chattanooga

- May 16-20 General Radiology
Sahara Hotel
Las Vegas, NV

Medicine Update '77

- April 28 Oncology
- May 12 Infectious Disease

ACP 1977 REGIONAL MEETINGS, POSTGRADUATE COURSES

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three-to-five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical

Association Advisory Committee on Continuing Medical Education. They fulfill Category I requirements for the AMA Physician's Recognition Award.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Postgraduate Courses

- May 16-20 SELECTED SUBJECTS IN INTERNAL MEDICINE, Pittsburgh
- May 16-20 INTENSIVE CARE MEDICINE, New York City
- May 18-20 CANCER: AN INTERDISCIPLINARY APPROACH, Toronto, Ont., Can.
- May 23-25 MEDICAL GENETICS, Ann Arbor, MI
- May 25-27 CURRENT BASES FOR PRACTICE IN RHEUMATOLOGY, Charlottesville, VA
- June 1-3 SELECTED TOPICS IN ENDOCRINOLOGY AND METABOLISM, Indianapolis
- June 6-8 CARDIOLOGY, Montreal, PQ, Can.
- June 13-17 ADVANCES IN INTERNAL MEDICINE 1977, Banff, Atla., Can.
- June 13-17 CLINICAL NEPHROLOGY, Rochester, NY

Regional Meetings

- May 6-7 Alabama Regional Meeting, Grand Hotel, Point Clear. Info: Thomas N. James, M.D., Dept. of Medicine, Univ. of Alabama Medical Center, Birmingham, AL 35294.
- May 6-7 Pacific Northwest Regional Meeting, Four Seasons Hotel, Vancouver, B.C. Info: W. B. Hurlburt, M.D., 1081 Burrard St., Vancouver, B.C., Can. V6Z1Y6.
- May 7 Minnesota Regional Meeting, Hennepin County Medical Center, Minneapolis. Info: Richard J. Reitemeier, M.D., 200 First St., S.W., Rochester, MN 55901.

Intensive Care Medicine

May 16-20, 1977

New York, New York

The ACP will sponsor a five-day postgraduate course in Intensive Care Medicine, May 16-20, 1977, at St. Vincent's Hospital and Medical Center in New York City.

The course is designed to acquaint the practicing physician with basic principles of intensive care and care of the critically ill. Sessions will consist of didactic lectures, followed by open panels and small group seminars.

Cancer Course

May 18-20, 1977

Toronto, Canada

The ACP, in association with the Royal College of Physicians and Surgeons of Canada and the Princess Margaret Hospital, will sponsor a postgraduate course titled "Cancer—A True Interdisciplinary Approach," May 18-20, 1977, in the Medical Sciences Building at the University of Toronto.

This course will emphasize the role of radiation and surgical methods of treatment of tumors, as well as other medical approaches to management of malignant disease at various stages and will provide a wide variety of workshops and seminars.

Medical Genetics Course

May 23-25, 1977

Ann Arbor, Mich.

The ACP, in association with the University of Michigan Medical School, will sponsor a postgraduate course on medical genetics, May 23-25, 1977, at the Towsley Center for Continuing Medical Education, Ann Arbor.

This course, designed for the primary physician, consulting internist, pediatrician, obstetrician or other specialist, will illustrate the important role of hereditary factors in disease and will demonstrate the application of simple genetic principles in the diagnosis, therapy, and—especially—prevention of clinical illness.

Rheumatology Course

May 25-27, 1977

Charlottesville, Va.

The ACP, in association with the University of Virginia School of Medicine, will sponsor a postgraduate course on the diagnosis and treatment of rheumatology, May 25-27, 1977, at the Boar's Head Inn Conference Center in Charlottesville, Va.

This course will provide instruction on connective tissue problems and an appraisal of advances in rheumatology and clinical immunology. Both common and unusual radiologic and dermatologic features of rheumatic diseases will be reviewed.

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners

in

Office Management of Emotional Problems

One, Two and Three Week Courses. Minimum of 40 hours per week.

Tuition Fee: \$350.00 per week for the 1st & 2nd week of training; \$500.00 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

WANGENSTEEN SURGICAL SYMPOSIUM

June 9-11, 1977

University of Kentucky Medical Center

Lexington, Kentucky

Registration fee: \$200.00

SYMPOSIUM ON RADIOLOGY OF THE NON-TRAUMATIZED EMERGENCY ROOM PATIENT

May 18-20, 1977

Hyatt Regency, Lexington

Lexington, Kentucky

Registration Fee: \$250.00

PEDIATRIC CHEST PROBLEMS

May 26-27, 1977

Hyatt Regency, Lexington

Lexington, Kentucky

Registration Fee: To Be Determined

For further information about the above, contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

AMERICAN COLLEGE OF CHEST PHYSICIANS

1977 POSTGRADUATE CALENDAR

Continuing Education Programs

See September, 1976 issue for listing.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

1977 Practice Management and Economic Seminar Schedule

Apr. 30- May 7	Queen Elizabeth II Cruise
June 18-25	Madrid, Spain
Aug. 20-27	Rome, Italy
Oct. 2-9	Key Biscayne, Florida

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

INDIANA CHAPTER

Emergency Medicine Seminar

May 11-14, 1977

CME Credits Applied For: 20 Hours

Co-sponsor: Indiana University School of Medicine

Fees: \$50.00-\$100.00

Contact: Davis Gettle, M.D., 10005 Hillsdale, Carmel, IN 46032, Tel. (317) 844-7105.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

May 2-15 **SYSTEMIC MYCOSES: HOW TO SELECT AND INTERPRET THE TESTS**, with John E. Bennett, M.D., Head of the Clinical Mycology Section, Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Disease, Bethesda, Md.

HYPERTENSIVE EMERGENCY WORKSHOP, with Harriet P. Dustan, M.D., President, American Heart Association, and Vice-Chairman of the Research Division, Cleveland Clinic Foundation; Edward D. Frohlich, M.D., Head of the Section on Hypertensive Diseases, Ochsner Clinic, and Vice-President for Education and Research, Alton Ochsner Medical Foundation, New Orleans; and Gerald E. Thomson, M.D., Director of Medicine at Harlem Hospital Center and Professor of Medicine, Columbia University College of Physicians and Surgeons, New York City.

May 16-29 **OVARIAN CANCER: THE AGGRESSIVE DIAGNOSIS and OVARIAN CANCER MANAGEMENT: THE PLANNED ATTACK**, with Hugh R. K. Barber, M.D., Clinical Professor and Director of Obstetrics and Gynecology at Lennox Hill Hospital, attending surgeon of the Division of Gynecology of Memorial Hospital, New York City, and President of the New York City Division of the American Cancer Society.

GAIT: NORMAL AND ABNORMAL, with Robert S. Stiffert, M.D., Professor and Chairman, Department of Orthopedics, Mt. Sinai Hospital, New York City.

BEHAVIOR MODIFICATION WORKSHOPS

Behavior Modification Workshops, presented by Dr. Luke Watson, Dr. Richard Foxx and Dr. John McKee, will be held on Saturdays, in April through November, 1977 in the following cities: Washington, D.C., Baltimore, Atlanta, Los Angeles, St. Louis, Toronto, Minneapolis, Bahamas, San Francisco, Seattle, Boston, Phila-

delphia, Fort Lauderdale and Honolulu. Workshop fees will be \$30. For further information, contact: BMT, Inc., 81 Arcadia Drive, Tuscaloosa, AL 35401, phone—(205) 553-2277.

EMERGENCY MEDICINE COURSE

May 4-6, 1977

Dallas, Texas

"Treatment of the Seriously Injured or Ill in the Emergency Department," a continuing education course for physicians and residents, will be held May 4-6, 1977, at the Sheraton Dallas Hotel, Southland Center, Dallas.

The course is sponsored by the American College of Surgeons Committee on Trauma, and co-sponsored by the Southwestern Medical School, Dallas, and the ACS Local Committee on Trauma, Dallas.

The course, offering a comprehensive program of continuing education in the definitive treatment of the seriously injured, is designed to enhance the knowledge and skills of physicians who are first confronted with trauma patients in rural, suburban and urban hospitals.

Course curriculum will include such trauma topics as: development of an EMS system, monitoring the severely injured patient, legal aspects of emergency care, management of the unconscious patient, management of psychiatric emergencies, drug abuse, and the evaluation and management of various emergencies.

The course has a limited registration of 250. For physicians, advance registration is \$185; registration at the door is \$200. The registration fee for residents is \$100. Advance registration forms may be obtained by writing to Dr. Thal at Department of Surgery, University of Texas Health Science Center, 5323 Harry Hines, Dallas, Texas 75235, or by writing to the Trauma Division, American College of Surgeons, 55 E. Erie, Chicago, IL 60611.

FRACTURES AND OTHER TRAUMA

May 11-14, 1977

Chicago, Illinois

The 21st Annual Postgraduate Course on Fractures and Other Trauma, sponsored by the Chicago Committee on Trauma of the American College of Surgeons, will be presented May 11-14, 1977, at the Sheraton-Chicago Hotel.

Subjects covered will include football injuries of the cervical spine, some late results of athletic injuries, injuries of the quadriceps mechanism, traumatic dislocations of the hip, the Charnley considerations for fracture management, the effect of various forms of neck braces, open fracture treatment, trauma to the knee with vascular injuries, epiphyseal injuries, initial management of hand injuries, the initial treatment of PIP joint injuries and the surgical correction of their contractures, and fractures of the carpal scaphoid.

The program is acceptable for 28 credit hours in Category I for the AMA Physician's Recognition Award and 28 Elective hours by the Illinois Academy of Family Physicians.

The registration fee is \$165; for interns, residents, and allied health personnel, \$55. For further information write: ACS, 55 E. Erie St., Chicago, IL 60611.

PSYCHOSOCIAL CARE OF THE DYING PATIENT

June 3-4, 1977

Considerable attention has been given to the psychosocial concomitants associated with dying, but few systematic attempts have been made to deal with the accompanying phenomena with which physicians are compelled to cope. Recent advances in medical knowledge and technology have produced a profound change in the nature of dying which, in conjunction with increased sophistication of therapeutic measures capable of prolonging life, has lengthened the average time between onset of fatal illness and the termination of life.

The specific purpose of this seminar is to suggest for physicians in clinical practice an effective model for dealing with the psychological issues surrounding terminality. The focus will be upon the sequence of events generally encountered by the physician and the terminally ill patient from diagnosis through death. Basic issues in psychosocial care will be outlined allowing the physician to acquire a working knowledge of the effective care of the dying patient.

This program is presented by the Cancer Research Institute and Extended Programs in Medical Education, University of California School of Medicine, San Francisco, CA.

THE NATIONAL ENDOWMENT FOR THE HUMANITIES ANNOUNCES HUMANITIES SEMINARS FOR MEDICAL PRACTITIONERS

The National Endowment for the Humanities announces four one-month humanities seminars for physicians and other members of the health professions to be held in the summer and fall of 1977. Members of the medical profession will be brought together with distinguished humanists from the fields of philosophy and religion for the month of full-time study which will be devoted to such issues as ethical conflicts, the rights of patients and practitioners, and health delivery.

Up to 15 participants will attend each seminar tuition free and will receive a \$1,200 stipend to cover expenses, plus reimbursement for travel up to a \$300 maximum. Participants may be accompanied by members of their families, but the stipend will not be increased.

James F. Childress, Professor of Christian Ethics at the Center for Bioethics, Kennedy Institute, Georgetown University, will conduct a seminar at Mt. Vernon College in Washington, D.C., July 3-29. The seminar will examine the ethical aspects of care, consent, paternalism, and the distribution of health care.

H. Tristram Engelhardt, Jr., a philosopher and physician currently at the Institute for the Medical Humanities of the University of Texas Medical Branch at Galveston will direct a seminar in the Washington, D. C. area September 11-October 6. The seminar will

examine the general issue of patients' rights and the particular issue of the right to health care.

John Lachs, Professor of Philosophy at Vanderbilt University, will hold a July 11-August 5 seminar at Vanderbilt on individual rights and the public good in the treatment of humans. The aim will be to help health professionals relate some of the pressing concerns of their daily practice to these larger issues.

William F. May, Professor in the Department of Religious Studies at Indiana University in Bloomington, will direct a seminar on the campus at Williams College, Williamstown, Massachusetts, June 26-July 22. Participants will explore ways of interpreting human nature and obligation as they affect decisions in medical practice.

Applications are invited from physicians and other members of the health professions. Selection of participants will be made by the seminar directors with the advice of selection committees. The application deadline is April 15 with selections to be announced about April 25, except for Professor Engelhardt's seminar, which is May 31; selections will be announced about June 8.

Further information, including a leaflet describing the seminars in greater detail and application forms, may be obtained from:

Professor James F. Childress, Center for Bioethics, Kennedy Institute, Georgetown University, Washington, D.C. 20057.

Professor H. Tristram Engelhardt, Jr., Institute for the Medical Humanities, University of Texas Medical Branch, Galveston, TX 77550.

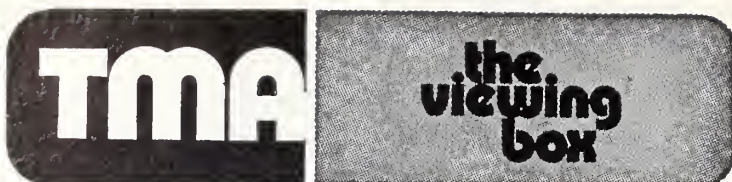
Professor John Lachs, Box 12, Station B, Vanderbilt University, Nashville, TN 37235.

Professor William F. May, c/o Linda Bernstein, The Poynter Center, Indiana University, 410 North Park, Bloomington, IN 47401.

NEW PROGRAM DEVOTED TO PATIENT NONCOMPLIANCE PROBLEM

Cooper Laboratories is introducing a long-term comprehensive program devoted to the often unrecognized and many-faceted problem of patient noncompliance. The new educational service is designed to help physicians improve compliance to prescribed regimens, particularly in middle-aged and elderly patients, many of whom are on multiple therapies.

The Cooper sales force is currently distributing an introductory booklet to the "Compliance" series which overviews the scope and nature of the problem. Future booklets will focus on interviews with the pharmacist and nurse, as well as the physician and patient. Each booklet will meet the criteria for one hour of credit in Category 5a for the AMA Physician's Recognition Award. A copy of the introductory booklet may be obtained by writing: Professional Services Dept., Cooper Laboratories, 300 Fairfield Rd., Wayne, NJ 07470.



REACH OUT AND TOUCH

Reach out your hand and touch me—if you dare. I am sick, afraid, insecure, fearful, apprehensive, lonely and misunderstood. I have no particular age, color, creed or sex but I share with others one particular emotion—fear of the unknown. I am a patient.

Your voice on the telephone answers my cry for help. Make it warm and kind and concerned. I usually feel that my problem is unique. If I seem unreasonable to you, please consider that I have been up all night with a feverish, crying child. Keep your defenses down. Have the wisdom to see through my outside facade to the sacred, tired mother underneath. Lend me your sympathetic ear. Even if I call only for an appointment, make your voice smile so that I can be glad I called.

But it's when I cross the threshold to your office that my real fears begin. Why, you ask, should a two-hundred-pound man in for a routine checkup be afraid? I do not recognize my emotion as fear, but something is there, nevertheless, and I do not like its feeling. Accept me by your smile. Acknowledge my presence. Call me by name. Help me to feel in control again.

And if my outward appearance is that of an attractive young matron with a smile which is a trifle too tight for your liking, speak a few words to me as well. I have discovered a lump and I am frozen with fear. My days and nights are haunted with thoughts of "what if" I need a cheery greeting for my sagging morale but most importantly, I need for you to emit an air of confidence. Give

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me positive thoughts about myself. I need your calm assurance to let me know I've come to the right place and that you are glad I've come.

When my step is unsure and my mind tends to wander a bit, give me your patience. My ways are childish but I do not want to be treated as a child. Grant me the dignity of my age. I'll undress for you as fast as my stiff fingers will allow. As you wait, ask me about my grandchildren or better still, ask for my recipe for green tomato pickles. I want so much to feel needed. Embrace me with your patience.

It's easy to love the lovely, but how about me—the dirty, smelly, unlovely bit of humanity that you see. My hair has never been styled in a beauty salon. I know little of the niceties you enjoy and I stand in awe of you in your immaculate white; so cool, sweet-smelling and secure. My world is different from yours. What do you know of near starvation and trying to rear six children on a pitiful amount of money; of no heat in the winter and outside toilets. "Anyone can stay clean," you say. Maybe in your world, but everything is more difficult in mine. It's easy for you to turn away. Don't reduce me still further. Touch my hand or my arm. Explain what's about to happen to me. Don't let me see the distaste in your eyes. Let me see instead your humility.

On and on we come—as unhappy children, misunderstood teenagers, elated new parents and tired old folks. We are all different but our needs are exactly the same.

Can you think of me as a person and not just a patient? Are you willing to smile when your feet hurt, to linger when you need to hurry, to always remain calm and unruffled? To keep offering the cup of kindness time after time even when it's not returned to you? Do you really care what happens to me and is there enough of you to handle all the details of your job and still have time to show genuine concern for me? Do you love enough to reach out and touch me? *I wonder.*

Elizabeth D. Wilson
Thomasville, Ga.

Pre-eminently, the power of our advocacy reposes in our example; but no example, be it remembered, can be powerful for lasting good, whatever apparent advantages may be gained, which is not based upon eternal principles of right and justice. Our fathers decided for themselves, both upon the hour to declare and the hour to strike. They were their own judges of the circumstances under which it became them to pledge to each other "their lives, their fortunes, and their sacred honor" for the acquisition of the priceless inheritance transmitted to us. The energy with which that great conflict was opened and, under the guidance of a manifest and beneficent Providence, the uncomplaining endurance with which it was prosecuted to its consummation were only surpassed by the wisdom and patriotic spirit of concession which characterized all the counsels of the early fathers.

Franklin Pierce
INAUGURAL ADDRESS
MARCH 4, 1853

Valley Psychiatric Hospital

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A 50 bed private acute intensive treatment facility with programs designed to treat psychological, alcoholic, and drug abuse problems of adults, adolescents and children.

A full range of treatment modalities are utilized including individual and group psychotherapy, chemotherapy, and adjunctive and family therapies. Adjunctive therapy includes continuing education through home-bound teaching for school-aged adolescents, recreational, occupational, and other supportive therapies. Group therapy is five days each week with individual therapy at least three days a week. Patients have six hours a day in scheduled therapeutic activities. Comprehensive outpatient services are available with outpatient group therapy sessions being held two nights each week.

Licensed by the State of Tennessee. A member of the Tennessee Hospital Association, the American Hospital Association, and the National Association of Private Psychiatric Hospitals. Accredited by the Joint Commission on Accreditation of Hospitals.

Psychiatry

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Henry Evans, M.D., Clinical Director
William C. Greer, M.D.
David V. MacNaughton, M.D.
John S. McDougal, M.D.
Robert T. Spalding, M.D., F.A.P.A.,
Medical Director

Internal Medicine Consultant
Charles D. Kennedy, M.D.

Clinical Psychology

Thomas L. Cory, Ph.D.
Jerry C. Gilliland, Ph.D.
Ann Morris, M.S.
Bobby G. Rouse, Ph.D.
Roy Smith, Ph.D.

Adjunctive Therapy

Dan B. Page, M.Ed.

Administrator
Dennis P. Dobard

Is there a tablet containing only
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Glyceryl Guaiacolate? **YES!**

1. Patient acceptable tablet dose.
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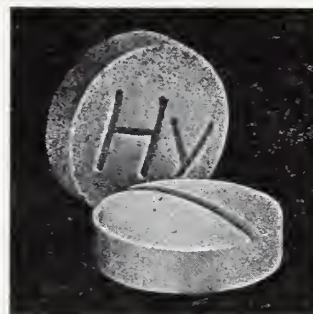
An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)

Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg.
Action and Use: This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscous fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. **HOW SUPPLIED:** White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. Literature Available: On request.

Available through all drug wholesalers.



HYREX COMPANY
832 South Cooper
Memphis, Tenn. 38104

Physicians' Business Costs Outpacing Their Fees, AMA Says

Physicians' fees have been rising rapidly. But their fees have not been rising as rapidly as their business expenses. And physicians' incomes per patient visit have not risen as much as the cost of living.

Those conclusions are based on an analysis of physicians' fees for the years 1971-1975 (Table).

Table 1
Indices of Physicians' Fees and the Cost of Living
(1971 = 100)

	1974	1975
Physicians' Fees	116.3	130.5
Business expenses component	118.5	133.1
Physicians' income component	114.7	128.8
Cost of Living (CPI, all items)	121.8	132.9

Sources

1. Physicians' fees and cost of living from the Consumer Price Index.
2. Business expense component from HEW data in *Federal Register*, June 16, 1975 (page 25502) and September 8, 1976 (page 37838).
3. Income component estimated from the above-listed CPI and *Federal Register* data.

During the first three years of that period, 1971-1974, physicians' fees rose substantially *less* rapidly than the overall cost of living, up about 5.1% a year for physicians' fees and 6.1% for the Consumer Price Index (all items). Then in 1975, physicians' fees went up by 12.3% while the CPI registered a 9.1% increase. In 1976, the annual average increases were: physicians' fees, 11.3%; CPI, 5.8%.

Why do physicians' fees rise as they do? To see why, it is helpful to divide physicians' fees (as measured by the CPI) into two main components: the portion that helps pay the wages of the doctor's staff, office rent, and other business expenses; and the portion the doctor pays himself.

During most of 1971-1974, increases in doctor fees were tightly curbed by government-imposed price controls. Doctors' business costs during that period went up about 18.5%, which was a faster climb than their fees, 16.3%.

Doctors' incomes per patient visit went up about 14.7% during that period, while the cost of living went up 21.8%. In effect, the purchasing power of physicians' earnings declined.

Price controls on physicians' fees were lifted in 1974. During the following year, 1975, physicians' business expenses (many of which could be anticipated at the beginning of the year) went up by 12.3%. The largest increase in doctors' business costs was malpractice insurance, which went up 84%.

It may be that many doctors simply increased their business costs. Average increase in physicians' fees was the same as the increase in their business

expenses, 12.3%. As a result, physicians' incomes per patient visit rose at nearly the same rate as their fees, 12.2%.

In effect, physicians in 1975 allowed themselves a partial cost of living increase.

While it is believed that a large portion of the 1976 increase in physicians' fees was attributable to increases in malpractice insurance rates, analysis will not be possible until the appropriate data become available.

(The foregoing analysis is summarized in the table. It indicates that [1] physician fees have not risen as much as their expenses; and [2] physician income has not risen as much as the cost of living.)

Physician Incomes Similar To Executive Salaries

How do physicians' incomes compare with those of non-medical professionals?

Comparison with a 1974 government study indicates that the average physician's income falls at about the mid-range of corporate executive salaries. The comparison is not exact, however.

The average physician netted \$51,224 (after business expenses) from his practice in 1974, according to the AMA. His gross receipts totaled \$86,575 and his business expenses totaled \$35,351. (These are the AMA's latest published estimates.)

According to the *Statistical Abstract of the U.S.* (1976 edition), (1) median net earnings for a physician under age 65 in 1974 was \$44,580; and (2) median net earnings for physicians (all ages) in incorporated practices was \$61,500. (Some physicians incorporate their practices because of certain tax advantages.) Source of the *Statistical Abstract's* information was *Medical Economics*.

In 1974, the US Civil Service Commission surveyed the salaries of eight non-medical professional occupations at the middle-management and executive levels of 144 American companies. Corporate officers were generally not included in the government survey.

Results of the survey, with average physicians' income added for comparison, are shown on Tables 1 and 2.

Table 1
Average Annual Earnings of Physicians and Non-Medical Professionals, 1974

	Manufacturing	Non-manufacturing
Physicians*	—	\$51,224
Directors of Personnel	\$38,476	33,941
Attorneys	35,319	36,510
Chief Accountants	32,665	32,970
Engineers	33,500	32,903
EDP Program Managers	34,102	37,039
Plant Managers	32,892	41,655
Commercial Managers	25,987	32,100
Economists	39,657	33,943
AVERAGE, non-medical professions	\$34,055	\$33,515

* AMA estimate

Source

"Study of Private Enterprise Pay Rates for Positions Equivalent to GS-14/18," U.S. Civil Service Commission, June 1974.

Table 2

Average Annual Earnings of Physicians and Non-Medical Professionals, by Level of Corporate Responsibility, 1974

	Manufacturing	Non-Manufacturing
Physicians*	—	\$51,224
Executive Levels**		
B	\$68,725	76,720
C	52,693	57,824
D	44,226	45,892
Middle Management Levels**		
E	35,490	36,797
F	29,224	28,013
AVERAGE, non-medical professions	\$34,055	\$33,515

* AMA estimate

** "B" is just at or below the level of corporate officer. The "A" level, corporate officer, was generally not included in the survey. "D" is the lowest executive level.

Source

"Study of Private Enterprise Pay Rates for Positions Equivalent to GS-14/18," U.S. Civil Service Commission, June 1974.

As table 1 indicates, the average physician's net income is generally greater than the average salaries of the eight non-medical professions.

Salaries among these professions varied, however, according to the individual's level of responsibility within the corporate structure. Table 2 summarizes the average salaries of the same eight professional groups according to their levels of responsibility.

Table 2 shows that physicians' incomes tend to be at the low side of the "C" level, mid-range among corporate executives, on the scale of corporate responsibility levels.

This comparison is far from exact, however. The reason: employees of most American companies receive certain "fringe" benefits—such as health and life insurance—in addition to their wages. Personnel people with whom we checked report that companies tend to pay out about 30 to 35 cents in fringes for every dollar of payroll.

Physicians, on the other hand, are typically self-employed individuals and, as such, do not receive most such fringes in addition to their earnings. Rather, they must purchase most such benefits from their after-business-expense earnings. (An exception is a Keogh-type retirement plan, in which the physician's contribution is tax-deductible.)

If we assume that the equivalent of fringe benefits accounted for 15% to 25% of a physician's net income in 1974, his "take home pay" was around the \$38,000 to \$45,000 range. That is, his personal earnings were roughly equivalent to those of a senior manager or a junior executive (or somewhere between "D" and "E" on the Table 2 scale).

How have incomes, both corporate and physician, changed since 1974? Precise figures are not available. However, a survey of executive pay in some 300 companies, conducted for the Commission on Executive, Legislative and Judicial Salaries, indicated an average salary increase of 6.2% per year during 1969-1976. Among companies where no

bonuses were paid, executive salaries rose by 6.8% a year.

An analysis by the AMA of the physicians' fee index of the Consumer Price Index indicated that physicians' net income per patient visit rose by about 6.5% a year during 1971-1975.

Thus, it appears likely, assuming no major change in physicians' patient loads, that physician net incomes hold about the same relative position today, compared with other non-medical professional salaries, as they held in 1974.

MD Vacancies in Project USA

Project USA, the AMA's program to recruit physicians for short-term service (usually two weeks) has year-round vacancies at Indian Health Service facilities and National Health Service Corps rural communities. Project USA physicians receive \$500 a week plus round trip air coach fare, and family housing accommodations are provided.

Malpractice insurance coverage is furnished under the Federal Torts Claims Act for service on Indian reservations, however the physician must provide his/her own malpractice insurance at a NHSC site. It is a simple procedure to extend an existing coverage to include short-term service at a NHSC location. Any expense involved in this process will be assumed by Project USA.

Physicians interested in participating in this program are requested to contact John Naughton, AMA, 535 N. Dearborn, Chicago, IL 60610; Tel. (312) 751-6388.

Medical School Enrollment Shows Another Increase

Total enrollment in the 114 US medical schools in 1975-76 was 56,244, an increase of 2,170 over the previous year, says the AMA's 76th annual report on medical education. First-year enrollment increased from 14,963 in 1974-75 to 15,351 in 1975-76. The number of graduates increased from 12,714 to 13,561. The total number of women enrolled in 1975-76 was 11,527, an increase of 1,741 over the previous year.

There were 39,330 full-time faculty members in the schools in 1975-76, for a ratio of 1 teacher for each 1.4 students. In addition, more than 70,000 physicians and others taught part time.

The total new enrollment of 15,351 students was selected from a total of 42,303 applicants. For the first time in many years, the number of applicants declined slightly from the peak of 42,624 in 1974-75. Each applicant applied to an average of almost nine different schools at the same time, hoping for acceptance by at least one.

By 1980, the 114 medical schools projected a first-year class of more than 16,000, with 15,500 graduates each year, and some additional medical schools will be in operation by that time.

Ethnic minorities enrolled in medical schools in 1975-76 totalled 4,595 (8.2%).

Clinical Center to Study Patients with the Sézary Syndrome

The cooperation of physicians is requested in the referral of patients with the Sézary syndrome (erythroderma, diffuse lymphocytes with cerebriform nuclei and membrane properties of T cells) for a study being conducted by the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, MD. For the purposes of this investigation, patients should have an abnormal lymphocyte count greater than 15,000/mm³. Operative reports, pathology reports, and slides should be forwarded for review.

Patients will receive a complete evaluation of their neoplasm and their overall immune status. They may be considered for systemic chemotherapy if appropriate for the patient's stage of disease. This will require long-term follow-up in collaboration with the referring physicians.

A summary of the workup, findings, and ultimate disposition will be sent to the referring physician.

Physicians interested in having their patients considered for admission may write or telephone: Dr. Samuel Broder, Bldg. 10, Rm. 4N115, NIH, Bethesda, MD 20014; Tel. (301) 496-6653 or Dr. Richard Fisher, Bldg. 10, Rm. 12N226, NIH, Bethesda, MD 20014; Tel. (301) 496-4916.

Clinical Center to Study Patients with Pituitary Tumors

The cooperation of physicians is requested in the referral of patients with pituitary tumors (exclusive of those patients with acromegaly) for a study being conducted by the National Institute of Child Health and Human Development and the National Institute of Arthritis and Metabolic Diseases at the Clinical Center, National Institutes of Health, Bethesda, MD.

Patients will receive a complete evaluation of their pituitary tumor and endocrine status, and will be considered for a randomized therapeutic program which will necessitate a long-term follow-up in collaboration with the referring physician.

A summary of the workup, findings, and disposition will be sent to the referring physician.

Physicians interested in having their patients considered for admission may write or telephone: Dr. Charles A. Strott, NIH, NICHD, Clinical Center, Room 10B-03, Bethesda, MD 20014; Tel. (301) 496-5909 or Dr. Ronald Kahn, NIH, NIAMDD, Clinical Center, Room 8N-238, Bethesda, MD 20014; Tel. (301) 496-2596.

Clinical Center to Study Patients with Hemochromatosis

The cooperation of physicians is requested in the referral of patients with iron overload for studies by the Hematology Branch of the National Heart, Lung, and Blood Institute at the Clinical Center, National Institutes of Health, Bethesda, MD.

Patients whose iron overload is secondary to

chronic transfusion and those with primary (idiopathic) hemochromatosis are needed. We are particularly interested in patients with homozygous beta thalassemia or congenital hypoplastic anemia who have had a life-long requirement for transfusion.

Several new non-invasive methods will be used to evaluate the extent of iron deposition and damage to various organs. Function of various endocrine glands will be determined by basal hormone measurements and then response to various provocative agents including hypothalamic releasing factors.

Treatment for those patients who require regular blood transfusions will consist of subcutaneous infusion of the iron chelator, desferrioxamine. Continuous administration of the drug will be accomplished through use of a small and convenient portable mechanical pump. Those patients with primary hemochromatosis will be treated with phlebotomy supplemented with desferrioxamine infusions as indicated by their clinical status.

Physicians interested in having their patients considered for admission may write or telephone: Arthur W. Nienhuis, M.D., National Heart, Lung, and Blood Institute, NIH, Bldg 10, Rm 7D-19, Bethesda, MD 20014; Tel. (301) 496-5093 (office), (301) 530-1745 (home) or Neal S. Young, M.D., National Heart, Lung, and Blood Institute, NIH, Bldg 10, Rm 7D-19, Bethesda, MD 20014; Tel. (301) 496-6069 (office), (301) 362-1589 (home).

Multiple Drug Use Common Among High School Pupils

High school pupils who use mind-altering drugs are very likely using several different drugs at the same time, a survey of more than 1,000 youngsters in the New Haven, Conn., area indicated. A definite pattern of "stepping stone" up the ladder to more dangerous drugs was established by the survey conducted in 1972-73. The report is published in the February issue of *Archives of General Psychiatry*.

The order of progression begins with alcohol, and moves up, in order, to marijuana, hashish, barbiturates, amphetamines, LSD, mescaline, cocaine and heroin, says Leroy C. Gould, Ph.D., and colleagues, of Yale University.

Three-fourths of the students used alcohol outside the home with friends. Over half had at least tried marijuana (one-third reported they were currently using it). One-third of the pupils had tried hashish, with 18% currently using it.

Some 18% had used barbiturates; 18% had used amphetamines; 12% had tried LSD; 10% had used mescaline; 9% had sniffed glue; 6% had used cocaine, and 2% had used heroin.

Multiple-drug use was prevalent. Fifty-eight percent of the students reported that they had used more than one drug, and 44% said they had used three drugs or more. At the time of the survey, conducted in the 1972-73 school year, 43% of the study population reported that they were still multiple drug users.

Hospital Drug Therapy Safe, World-Wide Study Confirms

Drug therapy for patients in hospitals is much safer than previous studies had indicated, says a report in the Feb. 28 issue of *JAMA*.

Among 26,462 carefully monitored medical inpatients, 24 or 0.9 per thousand, were considered to have died as a result of a drug or group of drugs, says the report from the Boston Collaborative Drug Surveillance Program, Boston University Medical Center, Waltham, Mass.

Most of those who died were seriously ill prior to the event that caused death. Only six of the deaths may have been preventable, and five of those were from overload in intravenous administration of fluids, rather than from the drug itself, say Jane Porter and Herschel Jick, M.D.

The study was carried out in seven nations across the world between 1971 and 1976. Rate of deaths per thousand patients varied from a low of zero in Israel and Italy to a high of 1.4 in New Zealand. In the United States the rate was 1.2 per thousand.

A communication from the Boston program in 1971 had reported death rate attributable to drugs of about 4 per 1,000, and this report has been widely used to estimate the extent of drug-induced deaths in the country at large.

"However, a good deal of the experience in the first report related to patients in a chronic disease hospital, and the results were therefore biased toward patients with cancer, alcoholic cirrhosis, and other serious chronic illnesses," Ms. Porter and Dr. Jick point out.

The new study encompassed patients admitted to acute disease hospital medical wards in general, a more representative group of hospital patients.

Among the 24 deaths, six were attributed to anti-cancer drugs, five to intravenously administered fluid therapy, and five to digoxin. Among the 24 patients, five were considered terminally ill prior to receiving the drug implicated, nine were considered severely ill, seven moderately ill, and three otherwise healthy.

"The New Health Professionals: Nurse Practitioners and Physician Assistants" Published by Aspen

Aspen Systems Corporation has announced the publication of *The New Health Professionals: Nurse Practitioners and Physician Assistants*, a resource document that assesses the present and future of nurse practitioners, physician assistants, medex, and other new health practitioners.

Written by health care professionals and lawyers, the reference explains the functions of new health practitioners, updates data on practitioner programs, examines clinical data, and provides information for deciding the status of new health practitioners in the eventuality of National Health Insurance.

The New Health Professionals, directed at health planners, individual practitioners, health care supervisors, educators and legislators, contains:

—a demographic overview of nurse practitioners, medex, physician's associates, and physician's assistants with descriptions of similarities between the groups.

—an update of the progress of programs for the training of new health practitioners and identification and analyses of major determinants of new health practitioners.

—documented research of health practitioner productivity, cost, task-competency and enabling legislation.

—data on the clinical impact of new health practitioners.

—a review of issues and a section of conclusions.

Also included in the book are demographic tables on practitioners' programs, figures assessing graduates, charts of procedural data, and introductions and conclusions within chapters.

The New Health Professionals: Nurse Practitioners and Physician Assistants is available from Aspen Systems Corporation for \$22.00. Further information may be obtained by writing Aspen Systems Corporation, Dept. RR, 20010 Century Blvd., Germantown, MD 20767.

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See next page for brief summary.

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Arboviral Encephalitis in Tennessee

R. MARK WEEKS, M.P.H., DAVID S. FOLLAND, M.D., and MYRON J. FRANK, M.P.H.

For the past three summers Tennessee has experienced outbreaks of encephalitis due to an arbovirus, St. Louis encephalitis (SLE) virus. Since 1974, a total of 157 patients with SLE has been reported to the Tennessee Department of Public Health (TDPH). Nineteen of these patients died, representing a case fatality rate of 12%. Ninety-three percent of the 157 cases were residents of West Tennessee where the environment favors this mosquito-transmitted illness.

St. Louis encephalitis is among the four arboviral encephalitides which are endemic in the United States. Other endemic mosquito-borne encephalitides include western equine encephalomyelitis (WEE), eastern equine encephalomyelitis (EEE), and California encephalitis (CE). SLE accounts for the greatest number of the arboviral encephalitis reports in the United States, with the majority of cases usually being reported from the south central states.¹ Although the yearly incidence varies, cases typically appear during the latter part of the summer when the virus may be epizootic (i.e., most active in the animal population).^{1,2}

Vectors and Animal Reservoirs

The first recognized outbreak of illness subsequently attributed to SLE occurred in St. Louis in 1933. Epidemiologists who pioneered the study of this extensive outbreak were divided in their opinions on the etiology of the unknown disease. Some felt that the epidemiology resembled that of

a polio outbreak, and consequently hypothesized person-to-person spread. Others suspected the mosquito as the agent of transmission.³

Today we know that birds are the major reservoir for the SLE virus. Although many species transport the virus, the common house sparrow appears to be one of the more prominent carriers. Several mosquito species maintain transmission of the virus in the avian population. In the South the subspecies *Culex pipiens quinquefasciatus* is the principal vector. These mosquitoes breed in artificial containers such as tin cans, discarded tires, and rain barrels; preferred breeding sites are in waters high in organic content (e.g., storm-sewer catch basins, poorly drained street gutters, cesspools). They feed both indoors and outdoors throughout the night, biting most frequently during the dawn and dusk hours.² Figure 1 illustrates the cycle of the SLE virus. Note that the reservoir(s) for the winter portion of the cycle is not known.

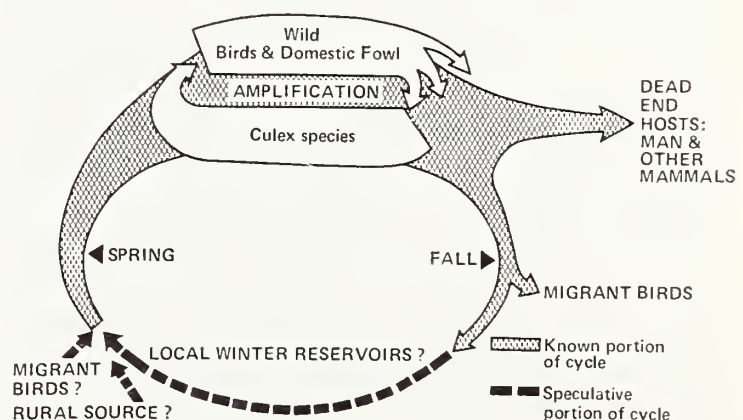


FIG. 1. SLE virus cycle in United States.²

From the Division of Communicable Disease Control, Tennessee Department of Public Health.

Clinical

Man acquires the infection through the bite of an infected mosquito. Clinical illness does not always result, but may appear 5 to 15 days after the bite. A serologic survey of SLE antibodies among residents of Houston indicates that there may be as many as 250 inapparent infections for each instance of clinical illness.⁴ Clinically apparent infections usually occur in those over 30 years of age from lower socioeconomic neighborhoods.¹ There is no apparent sexual predisposition towards acquiring the disease.

Tennessee surveillance data since 1974 show that although patients ranged in age from 9 to 88 years, 70% were over 54 years of age. Attack rates by socioeconomic levels in Memphis in 1975 indicate that residents of lower socioeconomic areas had a risk of SLE five times higher than those living in the middle socioeconomic areas.

The clinical illness presents itself as a febrile headache, aseptic meningitis, or encephalitis. Patients generally experience an acute onset with headache, high fever (102 F to 105 F), nausea and/or vomiting, dizziness, and stiff neck. Manifestations of CNS involvement such as disorientation, tremor, confusion, and coma may also be present. As a rule, CSF findings indicate a moderate pleocytosis (10-300 cells/mm³) with a slight elevation of protein and a normal glucose level. Duration and severity of illness is usually directly correlated with increasing age. Older patients are more likely to have an extended convalescence and are at a greater mortality risk, while younger patients often exhibit a relatively short and mild illness characteristic of aseptic meningitis.^{5,6}

Because the clinical manifestations of SLE are not diagnostic, laboratory studies are necessary for definitive diagnosis. Attempts at viral isolation are generally unrewarding. Serological tests, available through the laboratory of the TDPH Laboratory, provide both a definitive and convenient method of diagnosis. Complement fixation (CF), and hemagglutination inhibition (HI) tests confirm a diagnosis by demonstrating a four-fold rise in antibody titer between paired acute and convalescent sera. A presumptive diagnosis is based upon a single elevated titer of $\geq 1:80$ by HI or $> 1:16$ by CF; however, paired sera are most

important in diagnosing a current infection since SLE antibodies may persist for years.⁷ Management of the patient is supportive as there is no specific treatment for the disease.

Collection and Shipment of Specimens

An acute blood specimen should be collected as early in the illness as possible. Serum specimens are preferred for shipment, as whole blood may hemolyze en route to the laboratory. If whole blood is sent, collection and shipment in vacuum blood tubes generally reduces the risk of hemolysis. Three cubic centimeters of serum or 10 cc of whole blood is adequate for the laboratory studies. Acute specimens designated for SLE studies are tested by the laboratory without awaiting for the convalescent specimen, as the early detection of a presumptive SLE illness may enhance the control of an SLE epidemic. Upon receipt of the convalescent specimen, the paired acute and convalescent sera are tested together in order to confirm or rule out the SLE diagnosis. Serum or whole blood specimens may be mailed without refrigeration, and should be addressed to: Tennessee Department of Public Health, Division of Laboratory Services, Attention: Immunology Laboratory, Cordell Hull Building, Nashville, TN 37219.

Surveillance

SLE was first recognized in Tennessee in 1964. In that year surveillance efforts by the Memphis and Shelby County Health Department and the Center for Disease Control in Atlanta revealed four SLE cases in Shelby County.⁸ Human illness was not recorded again in Tennessee until 1974 when 42 cases were reported. Shelby County residents accounted for the majority of patients (38); the remainder lived in other West Tennessee counties. The state's largest outbreak coincided with the nation's most extensive epidemic during 1975 when more than 2,000 cases were reported from 30 states.² Most of these cases occurred in states located within the Mississippi and Ohio River Valleys. Tennessee reported 87 cases in 1975, and again, Memphis experienced the most activity with 64 cases (74%).

Due to the occurrence of the 1974 and 1975 outbreaks, the TDPH intensified its arbovirus surveillance activities in June 1976 to facilitate control of the disease and to learn more about its epidemiology. Weekly data on admissions of pa-

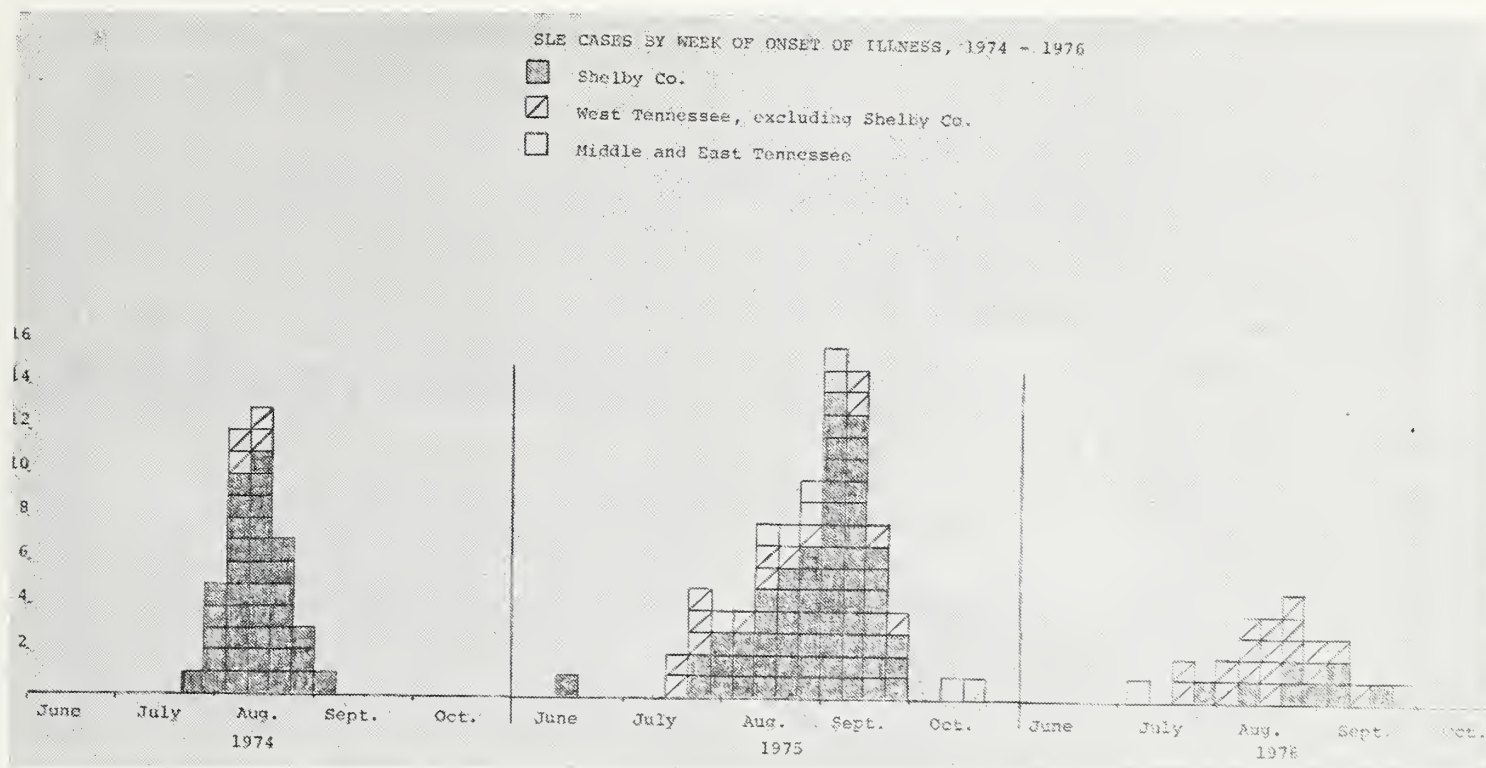


FIG. 2. Tennessee SLE cases by week of onset of illness, 1974-1976.

Table 1

Geographical Distribution of Tennessee SLE Cases 1974-76

	1974	1975	1976
Shelby County	38	64	8
West Tennessee (excluding Shelby)	4	14	18
Middle Tennessee	0	4	2
East Tennessee	0	5	0
Total	42	87	28

tients with fevers of unknown origin, aseptic meningitis, and encephalitis were obtained from West Tennessee hospitals through county health departments, and attempts were made to obtain serum specimens from these patients to diagnose SLE. Surveillance efforts revealed a decrease in incidence and a notably different geographic trend in 1976: only 28 cases were reported, 26 of whom resided in West Tennessee (Fig. 2 and Table 1). Thus, the incidence in West Tennessee decreased from 6.39 cases per 100,000 in 1975 to 2.13 cases per 100,000 in 1976. Unlike previous years, Shelby County residents accounted for less than half (eight) of the state's cases. Reasons for this decreased incidence statewide are unknown, but may be due to climatic variations in May (i.e., cooler temperatures and less precipitation), vector control efforts (particularly in Shelby County), widespread immunity in the population, or perhaps a combination of these factors. Although it is impossible to evaluate these factors with certainty, it is probable that climate and vector control were of greatest importance.

Prevention and Control

As there is no vaccine for St. Louis encephalitis, other means of prevention are necessary to avert epidemics. Vector surveillance and control provide a primary method of prevention. Weekly culex mosquito population estimates are made throughout West Tennessee by local health departments in order to provide area assessments of mosquito problems. The Memphis and Shelby County Health Department also monitors the prevalence of the SLE virus among animal reservoirs through weekly serological testing of sentinel bird flocks.

Should vector surveillance indicate accelerated vector activity, larval control is increased by oil applications or drainage operations to destroy the major breeding areas. When human illness is detected, rapid reduction of the adult mosquito population is undertaken to prevent widespread transmission of the virus. This is accomplished through ultra-low-volume application of bio-degradable pesticides by either land or aerial equipment, depending upon the extent of the outbreak and the availability of resources. The efficacy of these vector control techniques can be enhanced by rapid reporting of cases to facilitate an immediate reduction of viral transmission.

Public education can also help to reduce the threat of SLE. Local health departments disseminate information during the summer months urging the public to rid their property of culex breed-

ENCEPHALITIS/Weeks

ing grounds (e.g., tin cans, empty flower pots) and screen their windows. During an epidemic the public, particularly those over 50, may be advised to avoid outdoor exposure at the hours of dawn and dusk when the culex mosquito principally feeds. Mosquito repellants may also be useful to those outside after sunset.

Summary

The continued incidence of St. Louis encephalitis in Tennessee merits recognition by the medical community. This illness occurs during the summer and early fall, and it affects primarily those over 55 from lower socioeconomic neighborhoods. Infection varies from asymptomatic to fatal. Since the clinical criteria are not diagnostic, serologic tests are necessary in diagnosing SLE. Routine serologic testing on paired acute and convalescent sera is indicated during the summer and early fall on all patients with encephalitis, aseptic meningitis, and fevers of unknown origin.

The TDPH maintains intensive SLE surveillance to gain a better understanding of the disease and to reduce its incidence.

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INSECTICIDES

Are the bugs eating up your garden?

Most insects can be knocked out with sprays, powders and other poisons, but the unwary gardener sometimes can suffer from the effects of the bug sprays too.

Some tips on use of insecticides are offered by the American Medical Association.

- * Read the directions on the container carefully—and follow them. The manufacturer spells out the proper usage and safety precautions.
- * If the directions call for rubber gloves, protective clothing or goggles, leave this one for the experts and use a less potent poison.
- * Store the insecticide in its original container, with original label, in a safe, locked compartment, away from children and pets.
- * Destroy empty containers immediately.
- * Apply downwind, to avoid inhaling sprays and dusts. Stay out of freshly sprayed areas the rest of the day.
- * Do not smoke while spraying or dusting. Some of the chemicals are flammable. And you might inhale poisons along with the smoke.
- * If chemicals are spilled on the skin, wash immediately and thoroughly.
- * Cover bird baths, dog dishes, and fish pools before spraying. Pour leftover spray down a drain or into the soil. Don't leave it around in pans or pails.

In case of accident, follow the directions on the container. If in doubt, call your physician.

The Allergy G.A.M.E. *(Goals, Assumptions, Methods, Ethics)*

Part I

ROBERT PRESTON HORNSBY, M.D.

It's Not Easy to Be an Allergy Patient

Dear Doctor:

As you know, I owe you \$120.00 for allergy testing and for about two months of my vaccine program. I'm having problems paying the bill because I'm not sure that the treatment and testing done by you were adequate. I have been retested using intradermal as well as scratch tests and have found that I am allergic to dogs, house dust, and molds—three things that did not show up in your tests. This leads me to believe that if I had continued the vaccine program based on your testing, I would still be affected by these three things which are in my environment. So, I'm not sure what I'm paying for if the tests you gave me weren't complete enough to show all that I'm allergic to and if the vaccine didn't have all the antibodies in it necessary for me to build up natural immunities to all the things that cause my asthma.

I don't know exactly where to go with this, but I wanted you to know why you haven't received any money from me. Please let me know how you feel about this.

The preceding letter was recently received from an intelligent, 23-year-old woman, a patient in this office for six months. It is the fourth letter she has written to me; all of the previous letters were typed carefully, and all were answered carefully. This last letter is handwritten, on a "legal pad." On any given reading, careful readers may note that we have here a very verbal patient, rationalizing very well, who is anxious, and who feels two ways about her physician. She speaks for a vast segment of our lay friends and critics.

Goals for the Patient

Troubled folk come to us in the professions with at least one hope, voiced or not: they wish us to "identify a demon and exorcise it," in the words of a neighbor of mine, a neurosurgeon. Some demons they are prepared to help us locate; others they would rather hide, and hide from. The more demons we identify which are acceptable to our patients, the better they will love us: provided, that we can gently exorcise, and agree on what *is* demon and what is *not*.

Reprint requests to Dr. Hornsby, 606 W. Main Ave., Knoxville, TN 37902.

Goals for the Physician

I shall not easily forget what one medical school roommate shared with me long ago. He was in the medical profession, he allowed, as best he could tell, to "make money." I did not hear this much candor on this particular motive again until my postdoctoral training years, when a medical school professor advised: "Put a hundred patients a year on vaccine and when you are 50 you can retire."

This is not your average goal, nor average advice. Far more often over the years of medical school, training, and practice, one hears far better sentiment: "Take care of your patients, and your patients will take care of you." This has been, for me, the real event. It happens naturally and pleasantly. The Golden Rule is of God, and He seems to look out for His own, thank goodness!

"Fantasy Island"

Last night I came home from a date with my second child, to find the others, plus a house guest, watching an old movie on television. On an island, a very powerful and wealthy playboy had offered, for whatever the traffic would bear, a chance for wealthy clients to "relive" particular incidents from the past, or to indulge any sort of wishful dream. The violence shortly encountered turned me off; later we turned off the set before the melange ended. Troubled, we retired.

Fantastic Goals for Patients

"I want you to find out what's the matter with me, doc, and do something about it." Great. Sounds simple. Let's do it, right? And let's get on with it.

But wait a minute. Why does my patient want ME to do all the work? So that he or she will not have to put forth the effort? Better clarify that point early on in our relationship. And, sir or madam, having found out from careful history, physical, and testing what the troubles are, are you then prepared to hear me out as I lay it on you?

And, indeed, madam or sir, you may then neither want to have anything done, either by yourself, or by me, nor want to accept referral to a better helper than I. What then?

Naturally, patients don't expect to hear this noise from us: not early on, not later. What seems a simple contract may fall apart, from the patient's viewpoint.

Fantastic Goals for Physicians

"Do something!" Yes, sir or madam, right away. Here is what I do, and here is how I do it. Sound OK? Good. Let's proceed. (Watch out, doc; you're already hooked.)

Assumption made, though hidden:

1. I can "do my thing" in this case. My training and peers permit it.
2. I may do it. My license is current to practice in this state.
3. I should do it. The customer is always right.
4. My diagnostic and therapeutic skills are bound to hit the right problems as presented by this patient. We both understand this.
5. The problems as presented by the patient are going to have a nice correlation with the clinical findings I uncover, and a nice cause/effect relationship will obtain.
6. He/she will be delighted with this professional service and we can both rest easily. Prescription will be simple.
7. What is important to me equals what is important to the patient equals what is important to the next-of-kin (parent, spouse) equals what the sickness insurance carrier respects and rewards, diagnostically and therapeutically.

Vague Goals Spring from Hidden Assumptions...

Allergy patient goals are also intimately tied to assumptions already firm in patients' minds and hearts. Recognizable are:

1. I am allergic and belong in this office. Dr. X said so. My family, too.
2. Everything allergic is treatable by an allergist.
3. The most I am expected to do is to take shots. Briefly and seldom.
4. Shots are more potent medicine than pills. Pills are addicting.
5. Shots make me well and preserve my present life-style unhindered.

6. I am perfectly capable of knowing medical right from wrong.
7. The doctor is supposed to love me. Love me, love my hangups, semantics, etc.
8. It's "allergy" if it makes me feel uncomfortable.
9. I want to be OK inside; tell me it's something "out there," instead.
10. If I'm not satisfied, I don't have to pay a thing. But *someone's* going to pay, if I'm not to have satisfaction in this office, and pay *plenty!*
11. Surely the insurance company understands allergy and allergists; what they don't reimburse is not worth paying for.
12. No patient is responsible for his troubles; not really. It's got to be something else, doc. See, even Dr. X says so!

and Impossible Goals from Untested Assumptions

For allergists, there are equally grave hazards for the unwary. One of the most serious errors any physician can make is to "slip and fall into a routine" unvarying from patient to patient, day in and day out. The more we have things to "do" with and for our patients, and the more we depend on intricate equipment and procedures, the less we find time to individualize, to think, to keep in focus not only our common sense and five senses, but as Mark Twain has said, to "keep our imaginations in focus." We stand to degenerate into unresponsive and irresponsible technicians. We even have "paramedics" to help.

Among us allergists, there can be recognized another "dirty dozen" assumptions, all common, and *none* tested and proven:

1. All patients should be skin tested, especially if they demand it.
2. Scratch tests do not reveal as much atopy as intradermals do.
3. It doesn't take a physician to interpret skin tests and decide what is important from skin test results.
4. A "positive" is a "positive" is a "positive."
5. Wheal/flare means histamine release means atopy and *that's all it means!*
6. Vaccines help asthma, just as they help hay-fever,
7. And should be tried empirically in other situations.
8. Treat the asthma and the asthmatic will take care of himself, or vice versa.

9. Shots are more potent than pills and are non-addicting.
10. I am perfectly capable of knowing right from wrong in any situation.
11. The best I can do for my patients is to put them on vaccine "therapy."
12. Diagnosis of non-allergic disorders is best left to non-allergists. Likewise, the treatment. And never, *never* disabuse a patient or colleague of an already-formed impression, however unreal. Avoid controversy.

Echoes of Freud and Jung

Teaching centers, good and bad, tend to pass on much well-thought-out, conceptualized, rationalized "rationale." They are in a sense like Freud, of whom it is said that, having thought it so, it became thus. One recalls that Freud came to grief in his own psychoanalysis when he refused to deal honestly on the matter of a personal dream confided to his peer, Jung.

Jung was the ever-curious, open-minded doubter. Truth can penetrate such open souls, and in Jung's case, truth apparently did just that. He stayed in touch with his observations; he never really perfected a "theory."

And teaching centers tend to be reflections of

the personalities of strong leaders. In a sense, they tend to be Freudian and egocentric. They "rub off" on many of us; yet let us assume our part of the responsibility when this happens. Let us recognize it; let it be dealt with openly. In accepting and in recognizing, we can be free to control this vague, hidden side of personal and professional character. From dark, buried roots can spring ultimate values—for physician and patient alike—but only if we stay in communication with our experience, gained with open hearts and minds. And only if, like Jung, we keep our imagination in focus.

Allergists are as different, one from the other, as there are differences in goals, assumptions, methods, and ethics among the various individual backgrounds and the various teaching centers. The next, and concluding paper will focus on clinical methodology and professional ethics in the practice of allergy. Suggestions will be offered for simplified and more dependable diagnostic skin testing. The pitfalls of intradermal skin test protocols will be explored, and clinical misadventures reported.

Part II will appear in a subsequent issue of the JOURNAL.

AMA RANKS HIGH IN PUBLIC PERCEPTION OF PROFESSIONAL GROUPS

When asked to rate the ethical standards of 11 professional groups and the credibility of their organization, Americans show by a large majority that they trust the American Medical Association. This conclusion is drawn from 1976 studies conducted by the Gallup Organization, Inc., of Princeton, N.J.

In the area of believability, the AMA ranked 6.8 on a scale of 1 to 10. Other groups ranked were news media, 6.1; business corporations, 5.0, and labor unions and federal agencies, 4.9 each, the Gallup Organization found.

In the public's perception of honesty and ethics, physicians were ranked 56% "very high" or "high." Following were engineers, 49%; college teachers, 44%; journalists, 33%; lawyers, 25%; building contractors, 23%; business executives, 20%; senators, 19%; congressmen, 14%; labor union leaders, 12%, and advertising personnel, 11%.

Although the public shows a high regard for physicians, a disturbingly large proportion of the population does not share this view. Physicians are held in higher esteem than the other 10 occupations tested, but 44% of the public does not feel that physicians are highly ethical and honest.

Aggressive Therapy For Cardiogenic Shock

CRAWFORD W. ADAMS, M.D.

Cardiogenic shock may simply be defined as an inability of the cardiovascular system to supply blood adequately to the vital organs and the peripheral tissues (Table 1). Our discussion will be limited to one primary cause of low cardiac output, i.e., pump failure with cardiogenic shock following a massive myocardial infarction.

Table 1
Low Cardiac Output

A) Pump Failure	B) Inadequate Filling
1) Myocardial	1) Mechanical
a) Infarction	a) Pericardial Tamponade
b) Myocarditis	b) Pulmonary Embolism
c) Failure	c) Atrial Myxoma
2) Valvular	2) Functional
a) Rupture of Cusp	a) Tachycardias
b) Rupture of Chordae Tendineae	b) Arrhythmias

Hemodynamic and Pathophysiologic Changes

Cardiogenic shock is analogous to a violent sea during a hurricane. And like the sea, the biologic environment is continually changing with changes in pressure, flow, resistance, and oxygen tension. Our failure to successfully combat such tragic events is frequently based upon lack of respect for a falling barometer, or occasionally the degree of change is so insidious we fail to recognize the catastrophe before it is already upon us. Once faced with this emergency, we must bring all resources into action. There is no ideal specific therapy. Each instance of shock is filled with complexities. The management must be based upon fundamental physiologic and biochemical principles.

Whenever there is extensive myocardial damage, myocardial contractility and stroke volume

are reduced, cardiac output falls, and arterial blood pressure decreases. The transportation of oxygen is impaired and arterial blood lactate rises. With hypoxia, catecholamines are released causing arteriolar and venular constriction. The splanchnic and peripheral microcirculation is decreased as is the volume of blood returned to the right side of the heart, resulting in a further reduction of cardiac output. Hypotension also triggers the liberation of catecholamines with a subsequent increase in the tone of the arterial wall and with an increase in peripheral vascular resistance. Hypotension, the release of catecholamines, and a reduction of effective circulating blood volume causes renal and hepatic ischemia with a decrease in renal and hepatic perfusion. Renal ischemia initiates the release of aldosterone from the adrenal gland by way of the renin-angiotensin-aldosterone mechanism. A decrease in hepatic perfusion reduces the metabolism of aldosterone in the liver with a subsequent significant elevation of aldosterone into the blood stream enhancing sodium retention and potassium loss. With decreased hepatic perfusion, the utilization of glucose may exceed glucose output from the liver, followed by hypoglycemia, and increased plasma lactate: pyruvate ratios.

Although there is an outpouring of lactate from the ischemic heart, the large increase in lactate concentration originates from the general vascular perfusion deficit. With decreased oxygen transportation and poor capillary blood flow, anaerobic metabolism results in an increased production of organic acids in the peripheral tissues. The partial pressure of oxygen is reduced in the majority of patients with low cardiac output suggesting the presence of large pulmonary arterial-venous shunts through the broncho-pulmonary circulation. If there is a reduction of pulmonary blood flow, significant portions of the pulmonary

This investigation was supported by a grant from Ayerst Laboratories.

Reprints requests to Dr. Adams, 403 21st & Hayes Med. Bldg., Nashville, TN 37203.

vascular system remain underperfused, further contributing to generalized hypoxia, and depressed respiration soon leads to respiratory acidosis. Decreased cardiac output leads to decreased coronary flow, diminished coronary perfusion, and myocardial ischemia. Myocardial necrosis, ischemia, hypoxia, and potassium depletion become a fertile area for the development of cardiac arrhythmias. The complications of low cardiac output initiate a vicious cycle, and if they are not recognized and treated early, death ensues.

Cellular and Molecular Changes

Simultaneously, significant deleterious events are taking place at the cellular level.¹ Once glucose enters the cell from the capillary circulation, glucose is transformed into glucose-6-phosphate. The glucose metabolic flux diverges in one direction to glycogen in storage and another along the degradation and oxidation pathway to pyruvate. Some pyruvate is reduced to lactic acid and leaves the cell. Pyruvate enters the Krebs cycle in the mitochondrion where, through oxidation, ATP or energy is produced. The cell pumps fueled by ATP maintain potassium intracellularly and sodium extracellularly.

With pump failure, decreased cellular perfusion and hypoxia trigger compensatory arteriolar vasoconstriction. There is a reduction in the oxygen and the nutrient supply to the cell complicated by anaerobic metabolism, a decrease in energy and an increase in membrane permeability. The delicate balance of sodium and potassium is disturbed by a marked influx of sodium and water causing cellular edema and an efflux of potassium. The mitochondria become damaged and swollen. Lytic and digestive enzymes contaminate the circulation following lysosomal membrane rupture. Acidemia causes more cellular damage with eventual death of the cell.

Clinical Manifestations

The clinical manifestations of low cardiac output may be insidious yet must be recognized early. Early recognition and treatment within two hours will substantially increase the chance for survival. Apprehension or anxiety indicate impending shock or associated pulmonary embolism. Diminished sensorium, decreased mental alertness, or confusion suggest poor cerebral vascular perfusion, myocardial failure, or arrhythmias. Close observation of the patient may detect cyanosis representing a fall in cardiac output and/or

a decrease in peripheral vascular resistance. An increase in respiration suggests impending left ventricular failure, acidosis, anemia, or pulmonary emboli. Venous distention in the hands, jugular veins, or lingual veins indicates increased venous pressure due to left and right ventricular failure and reflects the interrelationship of the heart, venous tone, and circulating blood volume. Low urine output indicates renal failure, increased renal vascular resistance or decreased renal and internal organ perfusion. Clammy, wet, cold extremities indicate low cardiac output, hypotension, and increased peripheral vascular and renal vascular resistance. A narrow, weak, thready pulse suggests a low pulse pressure due to decreased cardiac output. A rapid pulse indicates a disturbance of conductions, myocardial failure, or impending shock. Hepatomegaly with a positive hepato-jugular reflux confirms right ventricular failure.

Therapy

Utilizing electrocardiographic "mapping" of ST-segments and T-waves, enzymatic liberation of CPK, and electron microscopy, Braunwald² has demonstrated salvageable "ischemic areas" within the area of infarction. The ischemic process that otherwise would progress to necrosis can be modified by early treatment with pharmacologic agents to reduce myocardial oxygen consumption, increase energy substrates, facilitate the removal of lactate, and protect the lysosomal membrane.

During the past 28 years, physiologic considerations and pharmacologic therapy for myocardial infarction have progressively improved. A retrospective study of myocardial infarction and cardiogenic shock is now in progress. Although this is a preliminary report, the results are encouraging. Included in this study are all complications of myocardial infarction. Of the first 1,000 cases of myocardial infarctions evaluated, 16 patients (1.6%) developed cardiogenic shock following an extensive myocardial infarction. Four patients died in the hospital in the first 18 days (25% mortality). Twelve patients survived and left the hospital (75%). Of the 12 survivors, five patients (41.6%) have died from five months to 13 years, and seven patients (58.3%) are alive from 2 to 14 years following cardiogenic shock (Table 2). Based upon this experience, the following therapeutic approach to cardiogenic shock is suggested.

Therapy should be directed toward improve-

Table 2—Case Reports

CASE	AGE	SEX	COMPLICATIONS	DISTURBANCE OF CONDUCTION	TREATMENT	FOLLOW-UP
1 (11086)	66	♂	Cardiac psychosis, CHF	NT A-VB	VR, a-blockade, Digitalis, Quinidine Diuretics, Anticoagulation	D - 5 years Age 71
2 (11340)	41	♂	Coma	NT PVT	VR, Levophed	L - 14 years Age 55
3 (11056)	39	♂	CHF	ST PVT	VR, a-blockade, Digitalis, Quinidine Diuretics, Anticoagulation	D - 5 months Age 40
4 (10166)	52	♂	CHF	LBBB	VR, ES, Corticoids, Digitalis Diuretics, Anticoagulation	L - 3 years Age 55
5 (10222)	32	♂	CHF	VT	VR, Aramine, Neosynephrine, Quinidine, Anticoagulation	D - 13 years Age 45
6 (10062)	84	♀	Atrial Infarction with large mural thrombus, Multiple Infarction	VT LAHB	VR, ES, Atropine, Diuretics	D - 24 hours Age 84
7 (10882)	67	♀	Intracerebral hemorrhage, Coma	PVT VF	VR, Lidocaine, Corticoids, Aramine, Quinidine, Digitalis, Isuprel	D - 4 days Age 67
8 (11165)	62	♂	Multiple Infarctions, CHF	PVT LBBB	VR, ES, Quinidine, Diuretics, Anticoagulation	D - 3 days Age 62
9 (10066)	52	♂	CHF, Grandmal seizures, Diabetes mellitus	PNT, VT, Arrest CHB, RBBB	VR, ES, Digitalis, Diuretics, Aramine a-blockade, Dilantin, Procaine amide Counter-shock, Lidocaine, Temporary pacemaker, Anticoagulation	L - 10 years Age 62
10 (10070)	71	♀	CHF	VT	VR, ES, Corticoids, Quinidine	L - 2 years Age 73
11 (11031)	59	♂	Acute brain syndrome, Cardiac psychosis, CHF	RBBB, VT, CHB VF, Asystole	VR, Counter-shock, Aramine, Isuprel Atropine, Pacemaker, Thorazine, Corticoids, Anticoagulation	D - 8 years Age 67
12 (12368)	80	♂	Diabetes mellitus, Insulin reaction (BS 48), CHF, Pericarditis	VF	VR, ES, Counter-shock, Diuretics Isosorbide dinitrate, Anticoagulation	L - 2 years Age 82
13 (12462)	54	♂	Ruptured papillary muscles of mitral valve in 48 hours CHF, Hypoxia, Cerebral ischemia, Aphasia, Right hemiplegia	Arrest	VR, ES, Dopamine, Hyaluronidase 1400 IU, Corticoids, Diuretics, Aminophylline, Digitalis, Isordil, Mitral valve replacement, Anti- coagulation	L - 2 years Age 56 - Slight aphasia and dysarthria Recovered from hemiplegia
14 (11750)	77	♀	CHF, Left middle cerebral thrombosis with right hemi- plegia, Low cardiac output syndrome	AV block, CHB LBBB, VT, VF	VR, ES, a-blockade, Temporary pace- maker, Thorazine, Corticoids, Lidocaine Anticoagulation, Digitalis, Quinidine	D - 2 years Age 79 Chronic CHF
15 (12756)	68	♂	Rupture of I-V Septum, CHF Low output syndrome. In 7 days → acute tubular necrosis, Diabetes mellitus	VT, VF	ES, a-blockade, Dopamine, Digitalis, Diuretics, Insulin, Renal dialysis, Defibrillation	D - 18 days Age 68
16 (12512)	56	♂	CHF, Pericarditis	VT, VF	VR, ES, Lidocaine, Defibrillation Hyaluronidase, Corticoids, Digitalis Diuretics, Anticoagulation	L - 2 years

CHF Congestive heart failure
NT Nodal tachycardia
A-VB Incomplete atrioventricular block
ST Sinus tachycardia

PVT Paroxysmal ventricular tachycardia
LBBB Left bundle branch block
LAHB Left anterior hemiblock

VF Ventricular fibrillation
CHB Complete heart block
VR Volume replacement
ES Energy solutions

ment of cellular function as well as correction of the hemodynamic deficit to salvage the ischemic myocardium. Treatment must be initiated promptly, and must be individualized. The physician should perform like a linebacker in a football game and be ready to shift his or her defense whenever there is a significant change in the biologic environment. Pain should be immediately controlled to prevent a more profound state of shock, and frequently, relief of pain alone will dramatically compensate for impending shock. Morphine sulfate (5-15 mg intravenously) is preferable for relief of pain and apprehension. Oxygen (100%) should be started at seven liters per minute. If the venous pressure is below 15 cm of water, the circulation should be challenged initially with 200 cc of an energy solution within 15 minutes to test hypovolemia. Intravenous infusion of D5W, potassium-glucose-insulin, plasma, or albumin should be continued, dependent upon subsequent determination of central venous pressure, and/or pulmonary arterial wedge pressures, and the overall response of the patient. If the pulmonary wedge pressure is less than 15 mm Hg, volume replacement should improve cardiac output. If pulmonary wedge pressure is greater than 20 mm Hg, alpha-blockade or vasodilation is indicated to reduce impedance to left ventricular ejection and improve cardiac output.

Outline of Therapy for Cardiogenic Shock

1. Damaged left ventricle is dependent upon higher filling pressures to maintain an adequate cardiac output. Therefore initially a trial of volume replacement is indicated. Challenge with D5W, plasma, Ringer's, albumin, or energy solution. Volume replacement also improves perfusion of anoxic cells.
2. Heparin (5,000-20,000 U) intravenously to prevent sludging of microcirculation, platelet aggregation and thromboembolism.
3. Energy solutions (glucose, K^+ , insulin) to stimulate transport of glucose across the cell membrane into cytoplasm, to increase available adenosine triphosphate and improve cellular metabolism.
4. Corticoids (hydrocortisone) 25-50 mg/kg to increase cardiac output, reduce myocardial oxygen consumption and peripheral vascular resistance. Enhance the entrance of amino acids and fats into pyruvate and Krebs cycle for available energy, decrease lactic acid by stimulating pathways which convert lactic acid to glycogen, and protect the lysosomal membrane thereby preventing the release of lytic enzymes.
5. Chlorpromazine (Thorazine) 25 mg intravenously to increase filling pressure of heart and restore effective circulating blood volume. Thorazine further decreases outflow resistance by blocking the effects of catecholamines on alpha-receptors, and depresses

subcortical areas including the sympathetic regulatory center.

6. Alpha-blockade phentolamine (Regitine) 5-15 mg in 30 minutes or phenoxybenzamine (Dibenzylin) 1 mg/kg diluted in 200 cc D5W over 1 hour to decrease peripheral vascular resistance, increase organ perfusion, and improve cardiac performance. May add fluid or Dextran 40 to maintain central venous pressure.
7. Dopamine (Intropin) 5 cc (200 mg) diluted in 250-500 cc D5W. If necessary, progressively increase dopamine from 2-5 mcg/kg/min to 20-50 mcg/kg/min to increase cardiac output, stroke volume, contractility, renal flow and Na^+ excretion. Dopamine may however increase peripheral vascular resistance as demonstrated by the following complication.

A 70-year-old male, following respiratory arrest and shock, received 29.6 mg of dopamine intravenously, utilizing an I-Vac dispenser in the left antecubital vein. After 35 minutes the blood pressure increased from 0 to 160-170 mm Hg and dopamine was discontinued. Within six hours, both hands became cyanotic and edematous despite normal blood pressures and good radial arterial pulsations. Although the right hand slowly and progressively improved, the left hand developed superficial necrosis (Fig. 1).



FIG. 1. Superficial necrosis, blisters, and edema of left hand and tip of left fifth finger following intravenous dopamine therapy, probably due to increased arteriolar constriction.

CARDIOGENIC SHOCK/Adams

8. Sodium nitroprusside (Nipride) 3 mcg/kg/min to 20-200 mcg/min intravenously in D5W only to improve left ventricular performance by reducing impedance to left ventricular ejection. Myocardial oxygen consumption is decreased by reducing left ventricular pre-load and after-load following relaxation of both arterial and venous smooth muscles.
9. Vasopressor therapy may be worthy of trial with persistent hypotension (less than 80 mm Hg). Do *not* give vasopressors in presence of increased peripheral vascular resistance.
 - a) Methoxamine hydrochloride (Vasoxyl) 10-20 mg intravenously will promptly increase blood pressure and hopefully reduce ischemia, but may increase cardiac contractility.
 - b) Isoproterenol (Isuprel) 2 mg/500 cc D5W intravenously at a rate of 1-4 mcg/min will increase rate and contractility but will also increase myocardial oxygen consumption. Blood pressure may fall.
 - c) Norepinephrine (Levophed) 4 mg/1000 D5W 3-8 microdrops/min will increase blood pressure, rate and contractility.
 - d) Metaraminol (Aramine) 5-10 mg intravenously in D5W will increase the blood pressure, contractility, cardiac output and coronary flow by releasing norepinephrine at nerve endings.

- e) Norepinephrine and isoproterenol³ may be titrated one against the other to maintain blood pressure above 100 mm Hg.

Conclusion

Serious and potentially lethal hemodynamic and pathophysiologic changes occur with low cardiac output following massive myocardial infarction, pump failure, and cardiogenic shock.

The high mortality from cardiogenic shock can be significantly reduced if the clinical manifestations of low cardiac output are recognized early and aggressive appropriate medical therapy is initiated.

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A Rose Garden for Every Medical Student

Are great things said only by great men? I think not. Years spent in obtaining formal education or in achieving social/academic prominence have sometimes little correlation to one's humanistic growth.

I would like to introduce to our readers a person, with no medical background maybe, nevertheless a woman of profound wisdom, Karleen Home Rosaaen. I want to share with you an observation she made.

"You know, the other day working with the roses, I was pondering on the various and sundry ailments that come to them, and the constant care and palliatives that must be administered. It occurred to me that each and every new medical student should be given a rose garden of six bushes and several varieties. This garden he must keep during his entire tenure in medical school and during internship. He would learn much of the frailties of growing things with such a project. He would learn to work hard on preventive medication, to be aware of the causal effects of wind and weather. . ."

How beautiful! Can you imagine the joy of taking care of lovely roses? That would be a most soothing, calming experience after a long day in the gross anatomy lab or of a busy emergency room duty. The plant has immense patience. It will listen to your complaints, and give you a silent but deep support for what you believe in. In return, it will demand dedication just as the Jealous Mistress. The rewards to the gardener would be immeasurable.

Yasuo Ishida, M.D.

Saint Louis Medicine, Dec. 8, 1976

Should the Nashville Surgical Society Be an Activist Organization?

JOHN L. SAWYERS, M.D.

In thinking about a topic on which to speak to you tonight, several questions have occurred to me: "What is the Nashville Surgical Society? What does it stand for? What has it done in the past? What will it do in the future? Is it assuming a leadership role in the community? Does it really speak for surgery in Nashville?"

To answer the first of these questions, the Society was founded in Nashville in 1940 by 15 surgeons. I would like to read the list of names because many of our recent members probably don't realize what a distinguished group of surgeons founded this Society. The founders were: Drs. Alfred Blalock, Barney Brooks, John Burch, M. B. Davis, W. C. Dixon, L. W. Edwards, Duncan Eve, George Johnson, Carl B. McMurray, Cobb Pilcher, Tom Pollard, Nat Shoffner, H. H. Shoulders, H. M. Tigert, and Harlan Tucker.

We have now grown to 131 members: 117 active members and 14 senior members. The Society consists of general surgeons, thoracic surgeons, orthopedic surgeons, urologists, neurosurgeons, and plastic surgeons.

What has this Society done in the past? It was organized to provide a forum for the exchange of ideas between leaders in academic surgery in the community and the leading surgeons in private practice. The Society has provided a platform for the presentation of surgical papers. In recent years the discussion comments from the members have been softened and no longer do we have the sharp critiques that were enjoyed in the past. I am not sure that this is entirely good. Are we more polite or are we just becoming more permissive? We have also provided for invited

distinguished outside speakers and a forum for the surgical residents in the community to present their work.

These are all excellent activities, but I have been asking myself recently, "Is this all the Nashville Surgical Society should stand for?"

This bicentennial year provides us with an opportunity not only to look back at our accomplishments but to look forward into the future. Unfortunately, that future is covered by dark clouds for the surgical profession. Let us look at three problems that are altering our surgical lives:

1. Professional liability suits
2. Increasing cost of surgical care
3. Governmental control and health planning

We could list many more but time does not permit.

Professional Liability Suits

The enormity of this problem impacted severely on all of us two years ago when we were faced with not only skyrocketing premiums but even unavailability of coverage. Thanks to many of you in this room the latter problem has been solved by the formation of the Tennessee Medical Association's own company.

Dr. H. William Scott, Jr., discussing the professional liability problem in his Presidential Address to the American College of Surgeons last year, pointed out the necessity for obtaining factual data concerning the medical injuries that initiate medical malpractice suits. This resulted in the closed claims study of the National Association of Insurance Commissioners becoming available to the medical profession. Of interest is that 80% of all medical malpractice claims are for real or alleged injuries received in hospitals.

While it had been commonly believed that

Presidential Address, Nashville Surgical Society, Nov., 30, 1976.

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NASHVILLE SURGICAL SOCIETY/Sawyers

poorly trained physicians were the major source of malpractice claims, the study showed that the majority of claims were against high-risk specialists who provide complex care. There is a greater prevalence of claims among highly trained, certified specialists, particularly those practicing in a hospital setting. In other words, those of us in the Nashville Surgical Society are most vulnerable to suits—the “best get sued.”

What can be done? The survey indicates that injury prevention programs and professional standards review need strengthening in hospitals. Some states, such as Florida, have instituted mandatory risk management programs in each hospital.

Last spring the Nashville Surgical Society held an extra meeting devoted to the problem of professional liability insurance. The emphasis was on the availability of insurance. The meeting was informative and had an unusually large attendance, which would indicate the desirability of our continuing discussions regarding the professional liability problem. The Regents of the American College of Surgeons have urged patient safety programs in each hospital as a means of improving the critical situation in professional liability. The initiative in Nashville hospitals for this type of program could be developed by this Society. We would benefit our patients and help protect ourselves against suits and increasing insurance premiums.

Increasing Cost of Surgical Care

Dr. George R. Dunlop, in his Presidential Address delivered this fall at the American College of Surgeons Clinical Congress, stated that “the most important problem facing surgery today is the escalation of medical costs.” The government’s Medicare and Medicaid program stimulated demand and cost. Medical care costs rose 80% between 1960 and 1973 while the consumer price index rose 60%. Blue Cross and Blue Shield plans across the country have collectively lost over \$600 million and find their reserves at an all-time low. Expenditures for health care from private carriers rose from \$8.3 billion to \$27.3 billion in the last decade—an increase of 229%. Government program costs rose from \$7 billion to \$40 billion, an increase of 484%. If current trends continue, the cost of financing health care for the elderly to the year 2000 is

projected in excess of \$2 trillion. When I tried these figures out on my pocket calculator, it not only blew a fuse, but disappeared in a puff of smoke!

The physician receives only 20% of the health care dollar while the greater proportion goes to the hospital. So what kind of impact can we, the members of the Nashville Surgical Society, have? After all, this Society, as I mentioned previously, was founded for the exchange and dissemination of surgical knowledge amongst its members. It is imperative now that we direct some of our impressive surgical research capacity to the arena of medical economics. All of us should become familiar with the costs of the services that we order for our patients. Surgeons have traditionally been concerned with the quality of patient care; now they must also be concerned about the cost of that care. Salvation of our voluntary fee-for-service system may reside in discriminating use of our limited medical care resources. This Society could provide the initiative for a study of the costs of surgical care in Nashville hospitals and the medical necessity for diagnostic and therapeutic procedures. Surely we can urge each member of the Nashville Surgical Society to reduce costs in his own practice setting.

Governmental Control in Health Planning

Three years ago, I was appointed by the board of directors of the Nashville Academy of Medicine to be their representative on the Mid-Cumberland Comprehensive Health Planning Agency. This was an insignificant organization until mandatory certificate-of-need legislation was passed. Then the CHP organizations had the clout to approve or disapprove new hospital and nursing home construction, renovation, and major capitol equipment purchases.

In December 1974, the National Health Planning and Resources Development Act (PL 93-641) was passed. This piece of federal legislation melds the Hill-Burton program, Regional Medical Program, and Comprehensive Health Planning into a new network for health planning and resources development. Health Systems Agencies (HSA) will possess broader powers than predecessor agencies, particularly in the areas of regulation, control of federal funds, resources development, and implementation. This is the fourth attempt of Congress in a little more than a decade to establish a system for regional planning of health services and facilities.

The Mid-Cumberland CHP took the lead in developing our regional HSA, and recently official recognition of the Middle Tennessee HSA was received.

Time does not permit detailing the HSA's regulations, but I want to call your attention to the fact that PL 93-641 considerably increases the authority of the nation's health-planning agencies. Not only can HSAs review applications for new or modified facilities, but they are also empowered to influence the overall structure of the health-care delivery system through their review of institutional appropriateness. This is a potent new strength which allows HSAs to approve not only new services, but also to review and make recommendations about the existing delivery system. HSAs have the authority to initiate transformation in the health delivery system. Obviously the federal government is intent that the health-care industry be subject to increased federal regulations and that a regional system of health-care standards and resources allocation is considered the model most likely to succeed before enactment of national health insurance.

You should realize that the law dictates the composition of each HSA board. A majority of the members must be consumers—up to 60%, and one third of the board members must be elected government officials. That leaves us providers a small minority.

HSAs are in their infancy. The purpose of decentralization of health-care decision making and reallocation of health resources need not be bad for the surgical profession but will necessitate all of us keeping informed and providing input into the planning process.

These are only three examples of issues facing surgeons today. What can or should we as members of the Nashville Surgical Society do?

Last spring, Dr. Andrew Dale, our president of two years ago and the new chairman of the executive committee, suggested that the Nashville Surgical Society establish a committee on issues. This is an excellent idea. Such a committee would maintain contact with sources of information, study units, and socioeconomic data on matters affecting surgery. The committee would consider problems facing the surgical community, keep the membership informed, and perhaps prepare position papers for the Society to make public. What better spokesman for Nashville's surgeons than the Nashville Surgical Society?

To be strong, man must organize. We have a

strong organization in the Nashville Surgical Society. We should keep ourselves informed not only about scientific medicine but also about the political decisions that will affect our patients and our surgical practice. Why shouldn't the Nashville Surgical Society be an activist organization standing for better care in this community? We could assume an active role to maintain high standards of surgical care in Nashville hospitals by evaluating, in a non-abrasive way, the quality of surgeons practicing in the community. If there are some "bad apples" in our hospitals, let the Nashville Surgical Society provide the leadership for a mechanism of safeguarding the surgical patient. If third-party carriers institute a "second opinion" rule for operations, let's be certain that second opinion comes from a board certified surgical specialist.

When political problems arise, political solutions require political means. Politics means people. To approach enough people in Nashville, we need the local or state medical society. The Nashville Surgical Society has talent which can be used by organized medicine to gain access to the votes. Several members of this Society have been president of the Nashville Academy of Medicine—to name the most recent—Dr. Pickens and Dr. Holcomb. All of us should be activists by participating in our local medical society and by making our voice heard regarding legislation which affects our profession.

In summary, many problems besides sick patients are now challenging surgeons. To answer these, we need to be informed. A committee on issues can keep us informed.

We should all become activists—not only politically, but also to preserve those things which are right for our patients. This includes insuring quality surgical care, discipline and enforcement of standards of surgical care, and maintenance of reasonable cost to the patient.

The Nashville Surgical Society has concern not only for exchange of scientific information among its members but also for the betterment of surgical care of patients in this community. Let us all play active roles in keeping ourselves informed and influence those who plan and legislate health affairs. Arnold Glasgow said, "Yesterday's formula for success is tomorrow's recipe for failure."

The Nashville Surgical Society has been a success. To continue successfully, the recipe requires an activist role by its members.

Regionalization of a Fetal Monitoring System

Part II

(Educational Support)

MARY F. HAIRE, R.N. and FRANK H. BOEHM, M.D.

In an earlier report¹ we addressed ourselves to Regionalization of a Fetal Monitoring System. The importance of an ongoing educational system for nurses as well as physicians was emphasized because without follow-up education much of the initial enthusiasm was dissipated and, as the subject of fetal monitoring was enlarging daily, continuing education was not only useful but also critical. A grant from the March of Dimes for the period of Jan. 1 through Dec. 31, 1976, was obtained for the purpose of teaching fetal monitoring techniques and interpretation in interested hospitals throughout Tennessee. This paper will present an overview of that experience.

To establish contact with these hospitals, letters were sent to the directors of nurses in all Tennessee hospitals practicing obstetrics. Because of the large area to be covered, only those hospitals with fetal monitoring equipment were visited. Arrangements were made to visit these hospitals at times chosen by the hospital and for as many sessions during the day as the head nurse wanted. All members of the hospital and medical staff were invited.²

A total of 36 hospitals participated in the program for all or part of the year. One hundred and thirty-six visits were made, with most hospitals receiving four or more visits at intervals ranging from every four to six weeks to three months. In several instances, the proficiency of medical and nursing personnel indicated less

need of assistance so that only two visits were made to these hospitals. In two instances, visits were stopped at the request of the hospitals because staffing shortages prohibited in-service programs.

The average formal session at each visit was 1½ hours. Instruction was also carried out on an individual basis between the formal sessions. Assistance in writing monitoring protocols, procedures, patient information handouts, and orientation procedures for new staff was frequently asked by head nurses.

Teaching sessions included demonstrations on the care of the machine, troubleshooting to determine the possible source of malfunctions, and care of the individual attachments. The indications for using each one, the possible appearance of the machine, and the printout in the event of malfunctioning were discussed to improve the technical proficiency of the nursing staff. Correct and incorrect application of the attachments to both the patient and the machine were discussed and the correct application demonstrated.

To improve interpretive skills several teaching methods were employed. A filmstrip on the use of the monitor, "Intrapartum Fetal Monitoring," and a slide/cassette lecture series, "Intrapartum Labor Monitoring," were supplied by Corometrics Medical Systems, Inc., and were used to provide the groundwork for further sessions. Copies of the book, *An Introduction to Fetal Heart Rate Monitoring* by Edward H. Hon,³ were given to each hospital to serve as a basic reference. Nu-

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merous examples from the monitoring files in the Department of Obstetrics and Gynecology at Vanderbilt University of each deceleration pattern, of changes in baseline rate and variability of normal and abnormal contraction patterns, and of several of the classical obstetrical complications such as prolapsed cord, abruptio placentae, eclamptic convulsions, and tetanic contractions were shown to further clarify identification methods. Discussion of the recommended treatment of each abnormal condition included the preferred sequence of intervention measures, the possible cause of each situation, possible preventive measures, and the necessary charting of pertinent information.

Because any discussion of fetal monitoring frequently leads to discussions of other areas of patient care, considerable time was spent on topics such as the importance of emotional support to the patient and her family, careful monitoring of traditional vital signs to identify complications early, maintenance of normal temperature in the neonate, the importance of parent-infant bonding, and the importance of accurately describing deviations from the normal.

Recognition of progress and frequent encouragement were necessary components of each session. Time was allowed for questions from participants and for questions directed to the participants to allow them to recognize their own levels of proficiency. Where patient load and physician permission allowed, return demonstrations of application techniques and/or explanations of printouts were practiced. Sessions of different aspects of fetal heart rate monitoring were repeated as often as necessary, the necessity being determined by each head nurse.

Recommendations for further programs would

certainly include the desirability of continuing educational services to individual hospitals. Such teaching methods allow the establishment of mutual trust and closer communication, in-depth concentration on individual problem areas, and a wider, more comprehensive dispersion of information. The size of the territory to be covered will necessarily limit the amount of time available for each institution and must be considered when assigning territories and topics to be covered.

Any such program must be carefully outlined before teaching begins, to ensure that the desired goals are identified and met. Avenues for complaints and suggestions must be established early and carefully maintained. Consistency in the quality and accuracy of information is an absolute necessity.

In summary, we feel strongly that such an "outreach" program should be part of the educational system of every tertiary level center. The overwhelmingly favorable response from the participants is indicative of the need for providing individualized educational services in the referring hospitals.

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Appendix

Outline of the Basic Information Given Each Hospital

I. INTRODUCTION TO MONITORING³

- A. Reasons for Monitoring
 1. Antepartum high risk
 2. Intrapartum complications
 3. Assessment of treatment procedures
 4. Routine with all labor patients
- B. Method of Monitoring
 1. External
 - a. tocodynamometer measures contraction duration and frequency
 - b. ultrasound measures heart rate
 2. Internal
 - a. intrauterine catheter measures contraction intensity, resting tone, duration, frequency

- b. scalp electrode measures baseline variability heart rate

II. INTERPRETING DATA RECEIVED

- A. Baseline Variability
 1. Central nervous system response
 2. Indicates fetal reserves for labor
 3. Loss indicates compromise of CNS control
 - a. drugs, atropine, scopolamine, MgSO₄
 - b. prematurity
 - c. hypoxia
- B. Baseline Rate
 1. Normal: 110-160
 2. Bradycardia: below 110

FETAL MONITORING/Haire

- a. severe hypoxia
- b. some drugs—e.g., paracervicals
- c. congenital heart lesions
- 3. Tachycardia: above 160
 - a. mild hypoxia
 - b. some drugs—e.g., atropine scopolamine
 - c. prematurity
 - d. maternal/fetal fever
 - e. cardiac arrhythmias
- C. Accelerations
 - 1. Short term rises in heart rate
 - 2. Smooth uniform shaped
 - a. seen often with breech presentation
 - b. occasionally seen with late deceleration
 - c. when seen alone not indicative of distress
 - 3. Irregular, sharp peaked
 - a. seen often with marked variability
 - b. in conjunction with fetal movement
 - c. reassuring sign
- D. Decelerations
 - 1. Short term falls in heart rate
 - 2. Seen in conjunction with contractions
 - 3. Early deceleration
 - a. starts and stops with contraction
 - b. reflects contraction intensity
 - c. rarely falls below 110
 - d. uniform shape
 - e. indicates fetal head compression
 - f. not a sign of distress
 - 4. Late deceleration
 - a. starts at or after peak of contraction
 - b. most of deceleration falls after contraction peak
 - c. reflects contraction intensity
 - d. usually falls within normal range
 - e. uniform shape
 - f. indicates uteroplacental insufficiency
 - g. always a sign of fetal distress
 - h. depth of deceleration not accurate indication of severity of situation
 - 5. Variable deceleration
 - a. irregular shape

- b. variable time relationship to contractions
- c. usually falls in same range each time
- d. generally gets worse by lasting longer
- e. mild—less than 30 seconds
- f. moderate—30-50 seconds
- g. severe—50 plus seconds falling to 70 BPM or less
- h. most common deceleration pattern
- i. indicates cord compression
- j. may be sign of distress

III. TREATMENT OF FETAL DISTRESS

- A. Head Compression
 - 1. Requires no treatment
- B. Late deceleration
 - 1. Turn mother to side
 - a. reduce uterine activity
 - b. improve uterine circulation
 - 2. Turn off oxytocin
 - a. reduce uterine activity
 - b. hyperstimulation most common cause
 - 3. O₂ @ 6-10 l/min by face mask
 - a. hyperoxygenation of mother
 - 4. Correct maternal hypotension
 - a. turn to side
 - b. elevate feet
 - c. increase IV fluids
 - 5. Deliver if above measures fail to correct pattern in 30 minutes
 - a. prevent brain damage
 - b. prevent death
- C. Variable Deceleration
 - 1. Turn mother to side
 - a. redistribute weight on cord
 - b. improve uterine circulation
 - 2. Trendelenburg, if necessary
 - a. remove presenting part from pelvis
 - 3. O₂ @ 6-10 l/min by face mask for severe cord compression
 - a. correct hypoxia
 - 4. Deliver if above measures fail to correct pattern (moderate to severe) in 15-20 minutes
 - a. prevent sudden death from sinus arrest
 - b. prevent brain damage or death

Obstetrical Complications as Seen on the Monitor

I. HYPERSTIMULATION OF THE UTERUS (four slides)

- A. Usually Caused by Overuse of Oxytocin
 - 1. Coupling contractions
 - 2. Contractions less than two minutes apart
- B. Hypertonicity
 - 1. Resting tone above 20 mm Hg (internal catheter)
 - 2. Coupling contractions
- C. Occasionally UPI Present
 - 1. Increase in rate
 - 2. Late decelerations
 - 3. Loss of variability
- D. Treatment
 - 1. Check strain gauge calibration for accuracy
 - 2. Turn off oxytocin if applicable
 - 3. Turn mother to left side
 - 4. O₂ @ 6-10 l/min if UPI present

II. ABRUPTIO PLACENTAE (four slides)

- A. Hypertonicity Often First Symptom
 - 1. Contractions may decrease in intensity as tonicity increases
 - 2. Bleeding not always present in early stages
 - 3. Sometimes induced by hyperstimulation
- B. Painful Uterus
 - 1. Continues to hurt between contractions
 - 2. Pain of contractions out of proportion to intensity of contractions
 - 3. Caused by increased tonicity
- C. Baseline Changes Present
 - 1. Seen when the abruption interferes with maternal-fetal exchange
 - 2. Increase in baseline rate
 - 3. Late decelerations
 - 4. Loss of variability
- D. Treatment
 - 1. Check strain gauge calibration for accuracy
 - 2. Turn off oxytocin if applicable
 - 3. Turn mother to side if tolerated

- 4. O₂ @ 6-10 l/min
- 5. Call physician

III. PROLAPSED CORD (two slides)

- A. All Breech Presentations At Risk
 - 1. May occur at any time before delivery
 - 2. Not always visible outside vagina
 - 3. Uncorrectable by manipulation
- B. Baseline Changes Dramatic and Erratic
 - 1. Sudden severe cord compression
 - 2. Not appreciably affected by position change
 - 3. Always do vaginal exam following dramatic heart changes
- C. Treatment
 - 1. Deep Trendelenburg position
 - 2. Manual pressure to presenting part if necessary
 - 3. Call physician

IV. CONVULSIONS (five slides)

- A. Toxemia or Epilepsy
 - 1. May have little or no warning
 - 2. Small tremors occasionally noted first, if intra-uterine catheter in place
 - 3. Sudden erratic heart rate and IU pressure changes
- B. Treatment
 - 1. Directed toward controlling convulsions
 - 2. When situation permits, administer O₂ @ 6-10 l/min
- C. Baseline Changes Seen Following Convulsions
 - 1. Increased rate
 - 2. Loss of variability
 - 3. Late decelerations

V. INTRAUTERINE DEATH (one slide)

- A. Often Suspected Before Labor Begins
 - 1. Lack of fetal movement
 - 2. No audible heart tones with fetoscope or Doppler
 - 3. Lack of uterine growth
 - 4. Decrease in uterine size
- B. Electrode May Be Used To Confirm

1. Amniotomy necessary
 - a. fluid usually dark
2. Printed heart rate coincides with maternal heart rate
3. Printed heart rate demonstrates response to maternal carotid massage

VI. DISCUSSION

- A. Monitor Not A Miracle Machine
 1. Information must be interpreted correctly
 2. Calibration checks at frequent intervals necessary to assure continued accuracy

3. Subject to mechanical breakdown
- B. Simply Adds Another Diagnostic Element
 1. Information must be correlated with other observations
 2. Information shows current fetal status and uterine activity
 3. Not always dependable in diagnosing anomalies
- C. Does Not Replace Nurse At Bedside
 1. Must be read to be of value
 2. Is not capable of offering emotional support
 3. Cannot provide necessary physical care

Contractions: Terminology and Possible Effects

I. TERMINOLOGY^{4,5,6}

- A. Tone: Muscle Tension Present When Uterus Not Contracting
 1. Average at beginning of labor: 3.87 mm Hg
 2. Average in active labor with intact membranes: 13 mm Hg
 3. Slightly less following rupture of membranes
- B. Hypertonus: Resting Tone Above 20 mm Hg
 1. Primagravida may have 20 mm Hg
 2. Oxytocin inductions may have 20 mm Hg
- C. Amplitude or Intensity: Pressure Exerted During Contractions (Not Including Resting Tone)
 1. Average at beginning of labor: 26.22 mm Hg
 2. Average in active labor: 48 mm Hg
 3. Usually unchanged by rupture of membranes
- D. Frequency: Number of Contractions in Ten-Minute Period
 1. Average in early labor: 3.5 per ten minutes
 2. Average in active labor: 5.58 per ten minutes
- E. Montevideo Units: Measurement of Uterine Work
 1. Measure intensity of each contraction in ten minute period and total
 2. Average in early labor: 76
 3. Average in active labor: 180-240
 4. Late labor may reach 260
- F. Duration: Time Interval From Beginning to End of Contraction
 1. Mean duration: 70-90 seconds
 2. Usually no change with progression of labor
 3. Usually no change with rupture of membranes

- a. begin in fundus
- b. move rhythmically down sides
- c. contract strongest and longest in fundus
3. Return to normal tonus between contractions
- E. Prolonged Labor Pattern
 1. Lack of synchronization between fundus & mid-part
 - a. may actually be strongest in fundus
 - b. may start in lower segment and move up
 - c. abnormal progression interferes with effectiveness
 2. Contraction intensity decreased
 3. Contractions irregular in rhythm
- F. Mechanical Obstruction to Labor Progress
 1. Contracted pelvis
 2. Large fetal head
 3. Contractions regular in shape
 - a. intensity average or slightly lower
 4. Frequency abnormally high
 5. Distinct hypertonus
- G. Treatment of Asynchronous Contractions
 1. Medication
 - a. oxytocin
 - b. morphine
 - c. anesthesia
 2. Hypnotism
 3. Maternal Position Change
 - a. most readily available
 - b. improves uterine perfusion rate
 - c. improves contraction effectiveness
 - d. less effort required to produce same amount uterine work
 4. Treatment Designed to Alter Uterine Activity

II. FUNCTIONAL AND NON-FUNCTIONAL CONTRACTIONS

- A. Braxton-Hicks Contractions
 1. Begin increasing about two weeks prior to labor
 2. Uterine tone does not yet increase
 3. May be regular (called "pre-labor")
 4. Average intensity may be 40-50 mm Hg
 5. Assymetry probably prevents cervical dilatation
 6. May be as uncomfortable as labor
- B. Assymmetric Contractions
 1. Causes decrease in intensity
 2. Causes increase in tonus
 3. Interferes with cervical dilatation
- C. Lactic Acid a Product of Muscle Work
 1. Increases in uterine muscle during contractions
 2. Level peaks as contraction peaks
 3. Failure to remove causes uterine ischemia
 - a. hypertonus hinders removal
 - b. decrease in contraction effectiveness
 - c. increase in maternal backache
 - d. interference with maternal-fetal exchange system
 1. poor uterine perfusion
- D. Normal Labor Contractions
 1. Not influenced by intensity and frequency alone
 2. Must demonstrate "fundal dominance"

III. EFFECTS OF CONTRACTIONS OTHER THAN CERVICAL DILATATION

- A. Circulatory System (maternal)
 1. Approximately 300 cc blood added to general circulation (from uterus)
 2. Initial increase in maternal heart rate
 - a. begins to decrease as contraction peaks
 3. Increase in Cardiac Output
 - a. peaks before contraction peaks
 4. Increase in Blood Pressure
 - a. systolic increase more than diastolic
 - b. more pronounced in supine position
 5. Increase in Femoral Venous Pressure
 - a. in supine position
 - b. increases and decreases with contraction
 6. May be Increase in Femoral Arterial Pressure
 - a. in supine position
 - b. obliteration of femoral pulse in some women
 1. "Poseiro effect"
 2. most often in right leg
- B. Increase in Intrathoracic Pressure
- C. Increase in Intra-abdominal Pressure
 1. 2-3 mm Hg
 2. more noticeable in supine position



oncology grand rounds vanderbilt medical center

TRANSFORMED CELL LYMPHOMA

F. ANTHONY GRECO, M.D.:

In the past 20 years important accomplishments have been made in the treatment of selected patients with metastatic malignancies. The first patients to be cured with drugs were women with advanced choriocarcinoma.¹ Since then a percentage of other patients with certain widespread malignancies enjoy long disease free periods following chemotherapy and are probably cured² (acute lymphoblastic leukemia, Hodgkin's disease, testicular carcinoma, Burkitt's lymphoma, embryonal rhabdomyosarcoma, Ewing's sarcoma, Wilm's tumor). Although patients with the more common advanced malignancies of lung, large bowel, and breast are not as successfully treated today, it is encouraging to look at the success obtained in patients with certain cancers as models for future investigation and therapy.

Today's discussion focuses on patients with a specific lymphoma, the name of which, as well as the therapy, is in important transition. Originally called reticulum cell sarcoma and later histiocytic lymphoma, the biology of this lymphoma is now better known, and thus a more specific and appropriate name has arisen based upon the character of the malignant cell—a transformed lymphocyte or transformed cell lymphoma. Recently patients with this malignancy have been recognized as potentially curable with specific chemotherapy, as will be discussed by Dr. Cooper.

Case Presentation

SETH COOPER, M.D.:

A 67-year-old white male was first seen at Nashville Veteran's Administration Hospital June 12, 1973 for a baseball size mass in the right axilla and a swelling in the right groin. He had lost 14 lb in the previous year. Physical examination was unremarkable except for the masses noted above, a lipoma on his neck, a grade 2 systolic ejection heart murmur, 2+ enlarged prostate, and cataracts. Chest X-ray (CXR) showed calcified granulomas and a lingular infiltrate. Hemogram was normal, as was bone marrow and intravenous urogram. Biopsy of the axillary mass revealed large

transformed follicular center cell lymphoma, also called reticulum cell sarcoma or histiocytic lymphoma. Three sputums for tuberculosis culture were negative. No therapy for lymphoma was recommended.

Two months later the patient returned on April 10, 1974 with 8 lb additional weight loss, episodic nausea and vomiting, pulse 104, a new 2 cm right axillary node, a 4x12 cm right inguinal mass, and massive edema of right lower extremity. Intravenous urogram showed delayed excretion on the right, with dilation of the proximal right ureter, and large pelvic nodes. He received 2,500 rad of cobalt radiotherapy to RLQ with decreased size of mass and decreased edema of the right leg.

One month later, on May 6, 1974, he returned in a stuporous state. He was oliguric, with BUN 83, creatinine 6.2, sodium 119, potassium 7.7, bicarb of 12, HCT 30%, CXR showing left pleural effusion, and persistent lingular infiltrate. Cystoscopy with retrograde pyelograms showed bilateral extrinsic ureteral obstruction with incidental BPH. Urine culture grew *Herellea* species. He was treated with broad spectrum antibiotics and combination chemotherapy, the regimen consisting of cyclophosphamide 2 gm IV x1, vincristine 2 mg IV weekly x3, followed by methotrexate 210 mg p.o. weekly x8 with leucovorin 180 mg p.o. weekly x8, and cytosine arabinoside 500 mg IV weekly x8 (COMA).

By the end of the first month, the azotemia cleared and intravenous urogram reverted to normal. He was hospitalized two other times for his large dose of cyclophosphamide at the beginning of two subsequent 12-week courses of chemotherapy. The remainder of his chemotherapy was given in the clinic.

In January 1975, after 36 weeks of chemotherapy, all lymphoma therapy was stopped. He has continued in complete unmaintained remission for 24 months. On Sept. 4, 1975, he had a cataract extraction. A trans-urethral resection of his enlarged prostate is planned soon. At age 70, his only medications are Dyazide, digoxin, aspirin and Bactrim.

Discussion

Dr. Cooper:

Reticulum cell sarcoma or histiocytic lymphoma has traditionally been considered the most aggressive of the malignant lymphomas, due to its rapid growth rate and dissemination and short response to chemotherapy and radiotherapy. Median survival of patients with Stage III or IV disease was approximately 12 months from diagnosis. Recent improved methods of chemotherapy have changed this outlook considerably.

Advances in immunological and pathological

Veterans Administration Hospital Case #412-05-7808.

classification in the non-Hodgkin's lymphomas have demonstrated that "histiocytic" lymphoma is actually a malignancy of transformed lymphocytes (transformed cell lymphoma). This aspect of our understanding of this disease will be discussed later by Dr. R. D. Collins.

In the last 20 years, experience with Hodgkin's disease has demonstrated that a detailed staging procedure to specifically delineate the degree of pathological involvement prior to therapy has improved patient survival. Several recent series of patients with non-Hodgkin's lymphoma have been studied by similar staging techniques, including laparotomy. Thirty percent of cases with transformed cell lymphoma are limited to Stage I or II disease and appear potentially curable with intensive local radiotherapy alone. Careful staging appears justified to identify these patients who will not require systemic chemotherapy. A laparotomy does not appear justified, however, in staging of patients with transformed cell lymphoma, since if Stage III or IV disease is present, it can be documented with lymphangiography, bone marrow biopsy, and needle biopsy of the liver in greater than 95% of patients.³ It is preferable to have these staging procedures done at a hospital where any involved tissue can be further studied immunologically while the cells are still living.

For Stage III or IV disease, chemotherapy now offers the possibility of long-term complete remission and probably "cure." Effective agents have been available for many years, but toxicity to normal tissue has limited the safe dose, and tumor often recovered before bone marrow with obvious poor results. Single drug alkylating agents result in complete remission in less than 10% of cases.⁴ Combination chemotherapy is more effective. Schein, et al have reported 35% complete remission rate with use of COPP (cyclophosphamide, vincristine, prednisone, and procarbazine) with a median duration of remission of 25+ months.⁵

In 1975, DeVita et al reported 27 patients at the National Cancer Institute treated with either MOPP (nitrogen mustard, vincristine, prednisone, procarbazine) or COPP (cyclophosphamide substituted for nitrogen mustard) who achieved a 41% complete remission rate. But even more exciting, was that all but one of the patients who achieved complete remission have remained in remission for 26-105 months. Since no further relapses had occurred after the first

two years, and two patients remained free of disease for 9 and 8½ years, the potential for prolonged disease free survival was demonstrated for this "poor prognosis" neoplasm.⁶

Even better results are suggested with other treatment regimens. Using information obtained with the kinetically similar mouse L 1210 leukemic model, Bertino and co-workers at Yale devised a different chemotherapy schedule. In this regimen non-cell-cycle dependent drugs (effective in all phases of cell reproduction), cyclophosphamide and vincristine are given first to reduce the amount of the tumor. Afterward the previously non-dividing tumor cells increase their cell division. Then each week for eight weeks drugs which are particularly effective in killing dividing cells, methotrexate and cytosine arabinoside, are administered. The therapeutic index of methotrexate was improved even further with "leucovorin rescue" (Lederle)⁷ using folinic acid. Six of eight histiocytic lymphoma patients obtained complete remission, and five remain in unmaintained remission 55-65 months.⁸

Sweet began using this protocol (called COMA) in 1974 and achieved complete remission in 8 of 12 patients (75%) who have been sustained 8-52 weeks.⁹

Another regimen was devised which used weekly doses of effective but nonmyelosuppressive therapy (vincristine, bleomycin, and prednisone) between large doses of potent but myelotoxic drugs (adriamycin and cyclophosphamide). This regimen produced remission in 17 of 22 patients (73%).¹⁰ This protocol, called BACOP, with slightly modified drug schedule, provided 48% complete remissions at the National Cancer Institute in 25 previously untreated patients with either diffuse histiocytic or mixed histiocytic-lymphocytic lymphoma. These remissions have been maintained 5-30 months. Only 3 of 11 previously treated patients achieved remission and two of them relapsed early.¹¹

Adler, of Buffalo, N. Y., reported that their group at Roswell Park achieved 50% overall remission rate with cyclophosphamide, vincristine, and prednisone, which was not improved with the addition of BCNU, nitrogen mustard, or bleomycin, in several dose combinations. Median duration of remission was only four months, and the median survival was only six months for the entire group.¹² Thus not all multiple drug therapy programs can produce the high rate of long unmaintained remission.

These promising early results with several small series of patients with either BACOP or COMA regimens appear to be sustained over the past year (personal communication, Dr. John Flexner reporting on the Non-Hodgkin's Lymphoma Conference, San Francisco, Sept. 30 through Oct. 2, 1976). Therefore, a prospective randomized clinical trial for transformed cell and large cleaved cell (histiocytic and mixed histiocytic lymphocytic) lymphoma has been undertaken at the Vanderbilt and Nashville VA Hospitals using either COMA or BACOP combination chemotherapy. Previously untreated patients will be staged by nonsurgical techniques, including X-rays, bone marrow biopsy, needle liver biopsy, and lymphangiograms, as well as careful immunological and pathological classification of tumor cells.

In summary, effective combination chemotherapy is now available for transformed cell (histiocytic) lymphoma which not only provides greater than 50% complete remission rate, but may provide a cure for some patients with the most aggressive of the non-Hodgkin's lymphomas. Dr. Collins will now discuss the pathology of transformed cell lymphoma.

Pathology

ROBERT D. COLLINS, M.D.:

Malignant lymphomas composed of large cells with abundant cytoplasm have usually been referred to as reticulum cell sarcoma, histiocytic lymphoma, or mixed lymphocytic and histiocytic lymphoma. Although the terms reticulum cell sarcoma and histiocytic lymphoma have often been used interchangeably, the Fascicle on "Tumors of the Hematopoietic System" chose histiocytic lymphoma as the preferred term, defining these neoplasms as "composed predominantly of neoplastic histiocytes in various stages of maturation and differentiation."¹³ The evidence that such neoplasms were actually of histiocytic origin is scant, although their phagocytic potential is mentioned in the Fascicle. The recent application of histochemical, immunological and ultrastructural techniques to large cell neoplasms has shown that the neoplastic cells in most cases are transformed lymphocytes rather than histiocytes.^{14,15} The evidence for this conclusion is (1) histochemical studies of these large cells have shown they rarely have the features of histiocytes; (2) by immunological studies most

large cells may be identified as lymphoid in type, and are usually B cells; (3) ultrastructural studies have shown that the large cells rarely have the morphological features of histiocytes, but in the great majority of cases resemble transformed lymphocytes; and (4) lymphocytes have been shown to change *in vitro* from small cells with dense nuclear chromatin to large cells with abundant cytoplasm and dispersed nuclear chromatin. Lymphocyte transformation obviously occurs normally *in vivo* as well as in disease states, and transformed lymphocytes are similar morphologically to the neoplastic cells of "histiocytic lymphomas."

In conclusion, histiocytic lymphoma and mixed histiocytic and lymphocytic lymphoma are misnomers; *most* are neoplasms of transformed lymphocytes. The term histiocytic lymphoma apparently refers to a group of diseases of both B and T cell origin. Various recently recognized clinical-pathological entities included under the general term "histiocytic lymphoma" include (1) follicular center cell neoplasms composed of transformed follicular center cells; (2) follicular center cell neoplasms containing mixtures of cleaved and transformed follicular center cells; (3) immunoblastic sarcomas of B cells; (4) neoplasms arising in the T zone of lymph nodes (Node based T cell lymphoma; immunoblastic sarcoma of T cells)¹⁶; and (5) various malignant histiocytoses.

The implications of this information for the clinician and pathologist are that lesions diagnosed in the past as histiocytic lymphoma include a variety of diseases, which may respond differently to therapy. For a more detailed discussion of recent changes in the diagnosis and treatment of lymphoid neoplasms, please see the January 1977 issue of the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION.

F. Anthony Greco, M.D., Editor

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Continued on page 342

TMA EKG of the month

A 51-year-old woman was admitted to Saint Thomas Hospital with marked cardiac enlargement. She had a long-standing history of hypertension. She had no history of chest pain. She complained of slight dyspnea, and had also noted mild swelling of her feet and ankles for several weeks. Physical examination revealed a blood pressure of 135/80. The heart sounds were slightly distant, without rubs, murmurs or gallops audible. The following electrocardiogram was obtained (Figs. 1 and 2).

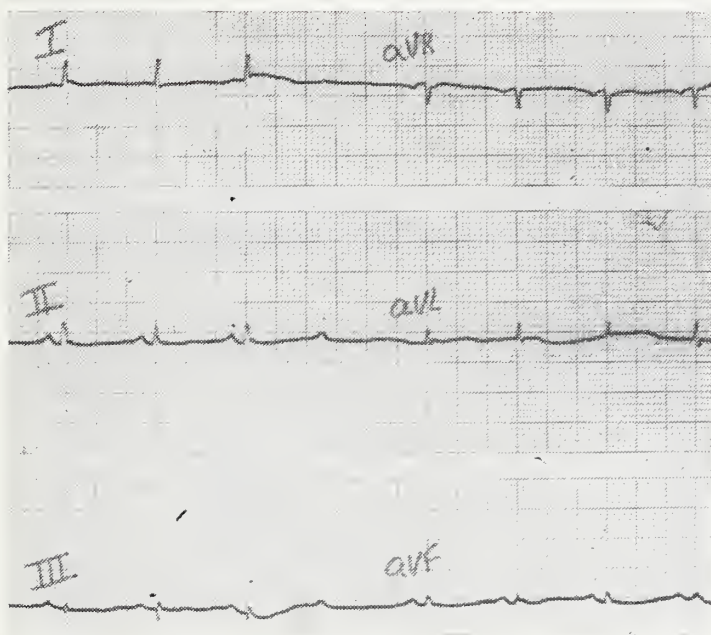


FIG. 1

Discussion

The electrocardiogram shows low voltages throughout. (Note the standardization following V4, V5 and V6 leads.) There are non-specific ST-T wave changes and the T waves are inverted

From the Department of Cardiology, Saint Thomas Hospital, Box 380, Nashville, TN 37202.

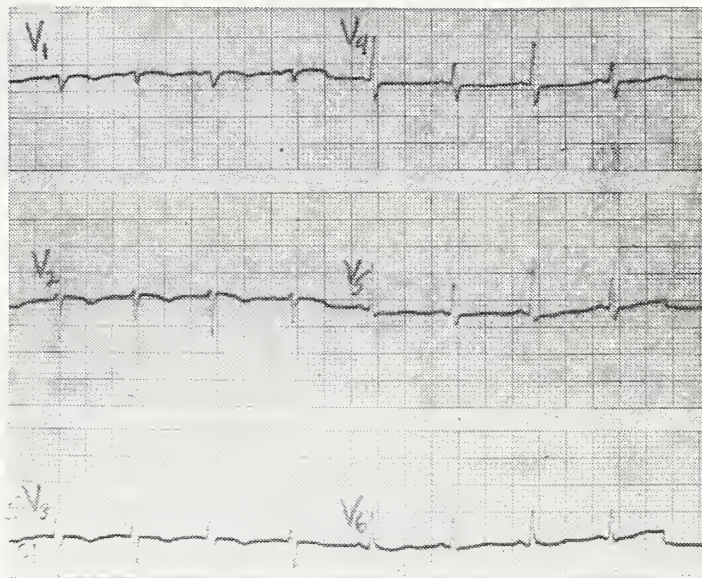


FIG. 2

in V1, V2 and V3. The striking finding is the electrical alternans. This is best seen in V4, clear beat to beat alteration in voltage. Close scrutiny also reveals a very slight alteration of P voltage with a beat to beat variation. (As the P voltage is very low this difference is subtle.) Electrical alternans involving atria as well as ventricles is pathognomonic of pericardial effusion. The presence of a large pericardial effusion was really documented by echocardiography in this patient. It should be emphasized that electrical alternans consists of a variation in the form or magnitude, but not in the duration of the ventricular complexes in alternate beats. This may occasionally be seen in ectopic tachyarrhythmias or for a few normal beats following ventricular premature contractions. In this situation however, it does not involve P waves. It is unrelated to pulsus alternans. Recent studies using echocardiography have shown that electrical alternans apparently results from physical beat to beat rotation of the heart within the dilated fluid-filled pericardial space.

W. Barton Campbell, M.D.
Co-Director

ANOTHER CORONARY RISK FACTOR— HDL CHOLESTEROL

Epidemiological evidence is very convincing that HDL (heavy density lipoprotein or alpha lipoprotein) is negatively or inversely correlated with ischemic heart disease. Individuals with high concentrations of HDL have a significantly lower risk of coronary arteriosclerosis. It is also apparent that concentrations of HDL do not bear any consistent direct proportional relationship to the concentration of LDL (low density lipoprotein or beta lipoprotein). This seems to provide an explanation for the common finding of increases in LDL, the main carrier of serum cholesterol, in healthy adults. Conversely, some patients with ischemic heart disease do not show increases in serum cholesterol or LDL. Clinical pathologists have not been confident about labelling individuals in the eighth and ninth decades as "phenotype IIa" or "hyperbetalipoproteinemia" merely because serum cholesterol and betalipoprotein are increased, since it is obvious that there has not been shortened survival. The protective effect of increased HDL explains the "enigma" of the Eskimo who almost routinely manifests marked hypercholesterolemia but suffers infrequently from ischemic heart disease.

Over the last two years, there have been broad population studies around the world comparing HDL levels in sufferers of ischemic heart disease and matched normal controls. The findings are clear-cut. Low levels of HDL correlate more perfectly with ischemic heart disease than do high levels of LDL.

Heavy density lipoprotein seems to perform two functions: (1) It serves as the carrier protein which facilitates the removal of cholesterol

from tissues to liver for catabolism. (2) It impedes the tissue uptake of the cholesterol transported to it by LDL. These two functions have been confirmed by studies on both total cholesterol pool turnover in humans using radiolabelled cholesterol infusions and tissue culture.

There are several factors which influence HDL levels. Males tend to have lower levels than females. Diabetics show lower levels than matched controls and the degree of reduction is more marked in those under poor control. The less physically active show lower levels than athletes. Clofibrate increases HDL but cholestyramine does not. The former appears to offer a therapeutic or prophylactic approach to the problem along with exercise.

It is not completely clear whether LDL and HDL operate totally independently of each other as risk factors, as some investigators claim. The answer will be forthcoming when analysis for LDL and HDL cholesterol become more than research interests and are in widespread usage.

Any laboratory that can perform a serum cholesterol determination can perform an HDL cholesterol determination, if a refrigerated centrifuge is available. Heparin and manganese chloride cause LDL and VLDL to precipitate leaving HDL in solution. After centrifugation, analysis for cholesterol can then be performed on the supernate in the usual way. Laboratories should gain experience with this assay, establish their own normals, and offer it as a part of lipid evaluations. The test is not recommended at this time as a replacement for lipoprotein phenotyping and evaluations of triglycerides and cholesterol. It appears to have a high predictive value for ischemic heart disease, perhaps before the fact, and should be performed in conjunction with the other studies.

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

Joseph J. Sannella, M.D.
Medical Director

ULTRASOUND LOCALIZATION OF INTRAUTERINE CONTRACEPTIVE DEVICE

A frequently occurring clinical problem is the question of accurate placement of an intrauterine contraceptive device. The following three cases illustrate some of the situations that may be encountered with these devices:

Case I: This 27-year-old female experienced pelvic pain and vaginal bleeding following the insertion of a "copper 7." Ultrasound examination revealed the IUD to be either partially or completely outside the uterus, lying between the uterus and the urinary bladder (Fig. 1).

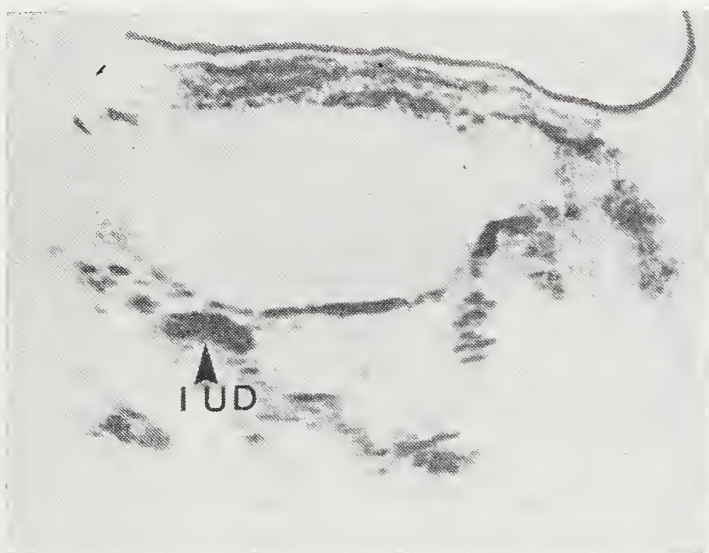


FIG. 1. IUD = intrauterine device.

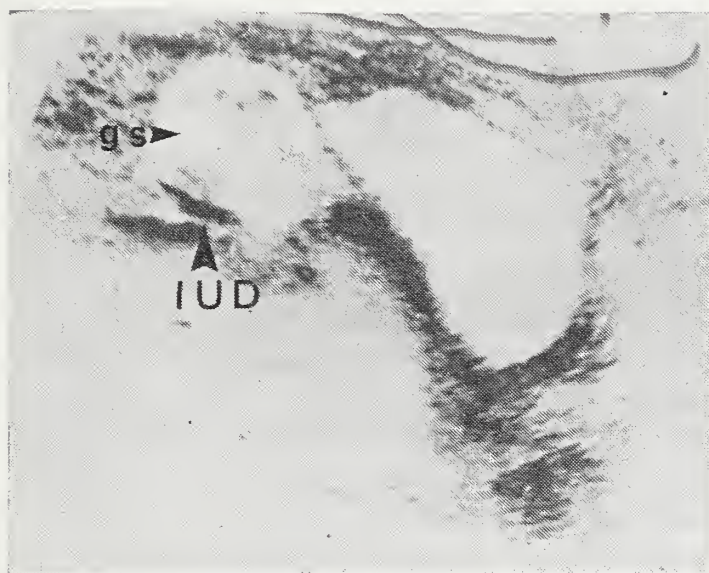


FIG. 2. IUD = intrauterine device;
gs = gestational sac.

Case II: This 26-year-old female had delayed onset of menses despite the presence of a "copper 7." Ultrasound examination revealed the IUD embedded in the posterior wall of the uterus. A gestational sac compatible with a nine-week gestation is present within the uterine cavity (Fig. 2).

Case III: This 34-year-old female experienced delayed menses and symptoms of early pregnancy. A pregnancy test was negative. Ultrasound examination revealed a "copper 7" within the uterine cavity, adjacent to an eight-week gestational sac (Fig. 3).



FIG. 3. IUD = intrauterine device;
gs = gestational sac.

A comparative study¹ of the T-CU-200, the Lippes loop and the Dalkon shield showed no significant difference in the rate of complications necessitating removal of the device. The Lippes loop showed a significantly higher expulsion rate. Robertson² reports an unexpectedly high pregnancy rate in users of the "copper 7," while McMahon³ emphasizes the necessity for accurate placement of the device.

Ultrasound is a non-invasive, radiation-free means for determining the position of an IUD and for assessing possible complications such as

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

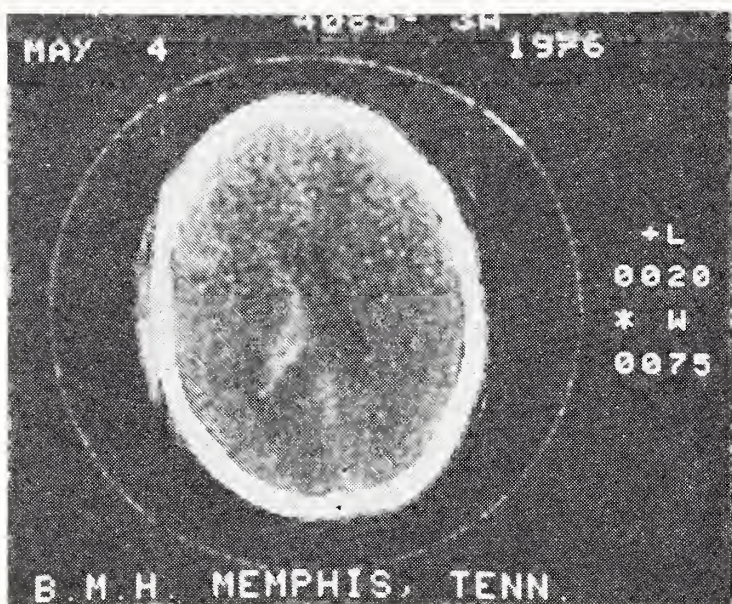
Continued on page 342

TMA cat scan of the month

A 21-year-old white female animal keeper at the zoo was kicked in the left temporal bone by a giraffe. She presented to the Emergency Room comatose.

Please choose the best diagnosis. This scan was done without the intravenous infusion of contrast material.

1. Subdural hematoma
2. Epidural hematoma
3. Intracerebral and ventricular hemorrhage
4. Normal scan



Discussion

The most important contribution of CAT scanning as with any other radiographic examination is the separation of normal from abnormal. Abnormal accumulations of blood are present within the calvarium, so this is not a normal scan.

Subdural hematomas are usually uniconvex and epidural hematomas biconvex, both lying adjacent to the calvarium on CAT scans. Also, the ventricles are usually shifted away from the collection of blood when it is unilateral.

The ventricles are midline in this case and the

accumulation of blood adjacent to the calvarium is not convex, so subdural and epidural hematoma may be excluded. The abnormal opacities that are present within the left lateral ventricle, the left cerebral hemisphere anterolaterally, and within the intrahemispheric fissure posteriorly allow one to make the diagnosis of cerebral contusion with intraventricular hemorrhage with reasonable certainty. The patient was operated on and the diagnosis proven. In addition to the contusion, her third nerve had been avulsed. This abnormality, of course, would have been impossible to detect with any previous diagnostic modality.

To differentiate subdural and epidural hematomas from cerebral contusions is most important as subdural and epidural hematomas are operable lesions, whereas cerebral contusions at times are not. One can usually differentiate cerebral contusion from epidural hematoma with confidence on CAT scanning. Even more important in many cases of trauma to the head is that a concussion only occurs, in which case the CAT scan would usually be normal. Generally, in such cases, no further diagnostic studies are necessary and these patients may be treated conservatively.

Blood in the calvarium is usually easily detected on CAT scans, as it is more opaque and therefore has a higher Hounsfield number than surrounding brain tissue and a lower Hounsfield number than calcium. (Hounsfield number refers to the absorption capabilities of tissue: Fat -50, water and CSF approximately 0, Brain 12-22, Blood 25-45, Calcium 50-500. These units were formerly called EMI units, but the name has been changed to Hounsfield units in honor of the inventor of computerized tomography. Necessary measurements may be made by altering the window level on the display console of the scanner.)

One must carefully evaluate CAT scans of patients who have suffered head trauma a week or more prior to scanning, as intracranial blood may become less opaque during this time. Either the calcium or albumin and globulin absorbs from the blood thus rendering it indistinguishable from surrounding brain. In such cases, arteriography may be necessary to detect the presence of a subacute or chronic hematoma. Early in the history of CAT scanning, iron was thought responsible for the opacity of blood. This was proven not to have been the case, however, and

From the Baptist Memorial Hospital, Memphis, TN 38146.

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from the tennessee department of public health

WATER QUALITY CONTROL PROGRAM

The Division of Water Quality Control in the Department of Public Health is responsible for securing, protecting, and preserving the right of the citizens of Tennessee to unpolluted waters and a safe, potable drinking water supply. The mission, as defined by the Tennessee Water Quality Control Act of 1971, is "to abate existing pollution of the waters of Tennessee, to reclaim polluted waters, to prevent the future pollution of the waters, and to plan for the future use of the waters so that the water resources of Tennessee might be used and enjoyed to the fullest extent consistent with the maintenance of unpolluted waters." The Murfreesboro Operator Training Center is an integral part of this program.

Realizing the need for trained personnel, the Division of Sanitary Engineering instituted an education program in the early 1930s out of which the present Murfreesboro Operator Training Center program grew. The voluntary certification program in Tennessee began as a yearly school for water plant operators at the University of Tennessee at Knoxville. At the onset, only the operators of large water plants attended the three-day seminar consisting of lectures and laboratory technique training. Examinations were given, and a Certificate of Competency was issued. By the early 1950s, schools were being held in three sections of the state (Knoxville, Nashville, and Jackson) with a total attendance of approximately 240 operators. During this period, a number of wastewater plant operators were also attending the school, and in 1958, the first certification examinations were given for wastewater treatment plant operators.

By the early 1960s, the schools had grown to such an extent that special training in smaller groups was needed. In 1961, a one-week laboratory course, limited to seven operators, was conducted by personnel from the Division of Stream Pollution Control in Nashville. The course consisted of lectures in the morning, laboratory work in the afternoon, and homework at night with examinations given and special certificates presented at the conclusion of the week. This type of training continued until 1968 with gratifying results.

By the end of 1968, the Division was receiving approximately 100 to 125 acceptable reports from wastewater plant operators in comparison to 10 to 15 reliable reports per month received in 1960. However, much work was still needed.

In 1969 and 1970, grants from the Department of Labor under the Manpower Development and Training Act enabled the Division to couple classroom training of wastewater treatment plant operators with on-the-job training. After this program was phased out, it became evident that the State of Tennessee would have to provide some type of facility and program by which operators of water and wastewater plants could be trained. Thus, the concept of an Operator Training Center evolved.

In 1971, personnel were employed to begin a training program in Murfreesboro, using the Middle Tennessee State University facilities. At the same time, architects were employed by the State to design the Murfreesboro Training Center, to be located on property owned by the City of Murfreesboro and adjacent to the new Joe W. Lovell Water Pollution Control Plant located on the banks of the West Fork of the Stones River. Funds for construction were provided totally by the State of Tennessee; the training center was dedicated in May 1974. It is a bright and airy, modern facility with two classrooms, two laboratories, a demonstration room, lunchroom and kitchen, conference room, library, and offices. Each classroom can accommodate up to 42 students; however, classes are usually limited to 20 to 25 students. The laboratories are furnished with most equipment the operator will encounter in his own laboratory. The demonstration room contains large pieces of sampling equipment, pumps, and working areas for demonstrations by instructors. During construction, sewer lines were laid from the adjacent wastewater treatment facility to the school. This plan enables students to directly sample wastewater, thus providing a realistic laboratory environment.

Providing basic and advanced training in all phases of water and wastewater treatment is the purpose of the school. Courses are offered in laboratory techniques, the operation of water and

wastewater treatment plant systems, and distribution and collection systems. Classroom instruction and on-the-job training is combined in most courses in an effort to completely prepare the operator; certificates are awarded upon completion of the courses. Elementary limnology is offered to assist wastewater treatment plant operators who have had new restrictions imposed on their plant effluent. To provide general background training, "Basic Science Skills Development" is offered. For all operators, studies in the "Theory and Practice of Waterworks Operations," "Theory and Practice of Wastewater Operations," and advanced courses in these areas are offered. In addition, special techniques are taught on such subjects as "Colorimetric Method for Metals," "Hydraulics and Pumping," "Coagulation and Sedimentation," "Installation, Checking and Repairing of Reduced Pressure Backflow Devices," and "Evaluation of Public Water Supplies." Classes dealing specifically with fluoride and chlorine problems are also conducted.

Operating expenses for the Center are provided by the State. Training funds are provided by grants from the federal government. From 1971 to date, federal grants totaling \$897,424 have been received. Approximately half of these funds were provided for operator training. The other half will provide salaries for newly hired operators who will receive training at the Operator Training Center. These funds have been available in the past as this is the only facility of its kind in the nation. Even today, it maintains its position as a front-runner in the area of operator training. Approximately 2,500 individuals participate in some phase of the school yearly for special studies in areas such as fecal coliform, iron and manganese, chromium and zinc, and cyanide as well as general background courses. These programs range in length from short workshops to four-week classroom sessions coupled

with on-the-job training.

Tennessee has maintained a voluntary certification program for almost 40 years. On May 12, 1971, the General Assembly passed the Mandatory Certification Act requiring legal certification of operators with compliance required as of May 12, 1972. The Act requires that all water treatment plants, water distribution systems, wastewater treatment plants, and wastewater collection systems be classified according to their size and complexity, and the requirements of the operators be set accordingly. Only the operator in charge is legally required to be certified; however, all other operators are encouraged to become certified. An applicant must meet given standards of education and experience; certification of the operator is then obtained by written examination only and maintained by attending a three-day seminar once every three years. Examinations are conducted by the Certification Board. Since its inception, the Board has designated the Division to conduct these short courses and administer the examinations in their name. The Board consists of two members currently employed as operators, an operator representative of a municipality, a faculty member of an institution of higher learning, and the Director of the Division. Joe Lovell, Larry Eddings, Leonard Lynch, Dr. Alexander A. Freidman, and John Saucier are currently serving on the Board.

As with all environmental health disciplines, the Division of Water Quality Control of the Tennessee Department of Public Health is actively engaged in the practice of preventive medicine. Prevention of waterborne illnesses has largely been accomplished through the cooperative efforts of public health personnel health professionals in the private sector and concerned community workers working to assure safe water supplies.





tennessee department of mental health & mental retardation

RESEARCH AND TRAINING ACTIVITIES DEPARTMENT

Many innovative training and research programs have been launched by the Tennessee Department of Mental Health and Mental Retardation.

One such program provided stipends to qualified individuals who were interested in pursuing a career in the mental health and mental retardation profession. Today, many highly qualified persons are employed within the Department as a result of this financial assistance, encouragement, and support.

Economic factors prevailing at the beginning of the current administration resulted in a decrease in the availability of funds for this program, and after careful review, the stipends were discontinued.

The Department now recognizes a dearth of professionals in many areas of service. Foremost, there are not enough qualified psychiatrists and other physicians to staff our five mental health institutes. The physician coverage in our three developmental centers is inadequate to render the scope and quality of care required by our residents.

In addition, the various community mental health centers throughout the state, in many cases, have a less than optimal number of physicians. Consequently, we now recognize the necessity for either re-establishing the stipend program or developing some other method of providing similar opportunities for physicians, especially psychiatrists.

The Department has always recognized the difficulties encountered in the recruitment of sufficient numbers of employees on other levels. We are in need of additional occupational therapists, recreational therapists, adjunctive therapists, physical therapists, and psychiatric nurses. Persons with these skills are exceedingly important to our treatment and training programs for the mentally ill and mentally retarded.

It is for this reason that we are now on record as favoring the re-establishment of a stipend program to provide special assistance to qualified individuals who seek a career in mental health

and/or mental retardation services. In addition, we hope to enhance other programs offering continuing education opportunities to employees within the system—professional and paraprofessional.

The research projects of the DMHMR have been reaching in scope and service. In 1971, the Tennessee Neuropsychiatric Institute was established representing a partnership between DMHMR, the National Institute of Mental Health, and the Vanderbilt University School of Medicine. This program has achieved national and international acclaim for basic and pharmacological research in schizophrenia and in the biological aspects of that disorder.

In 1966, the Alcohol & Drug Research Center at Memphis Mental Health Institute was established by Dr. David Knott, a nationally known clinician and researcher in alcoholism diseases; and Dr. James Beard, a biochemist who has distinguished himself in the field of research. This center represents a partnership between the DMHMR and the University of Tennessee Center for Health Sciences.

Also, as part of the Department's ongoing research programs, Dr. Charles Proctor, chairman of the Department of Pharmacology at Meharry Medical College, is conducting basic biological research on schizophrenia and has received recognition for developing a substrate which can be used to diagnose that disorder by the study of blood samples.

It is not our policy in Tennessee, as it is in many states, to develop large research institutes which are supported with much funding from the legislature. Instead, we wish to upgrade and expand those programs which we already have and develop new research activities in cooperation with our major universities.

If DMHMR can join hands with our fine universities which have faculty members who have vision and interest in basic mental health and mental retardation research as well as clinical and applied research, we feel we can accomplish much. We hope, of course, to involve our mental health institutes and developmental centers in this effort.





VAGINAL AND CERVICAL CANCERS ASSOCIATED WITH EXPOSURE IN UTERO TO DIETHYLSTILBESTROL

I. *What Is Diethylstilbestrol (DES)?*

DES (Diethylstilbestrol or stilbestrol), a synthetic estrogen-type hormone, was first synthesized in the late 1930s. During the 1940s many physicians throughout the United States and other countries prescribed this substance for pregnant women. Several studies suggested that in complications of pregnancy such as bleeding, threatened miscarriage, or diabetes, this treatment improved salvage of the fetus.

Although its use in pregnancy has been discontinued, DES remains a useful agent for certain menopausal symptoms, certain cases of carcinoma of the breast and prostate, and a few other clinical problems.

II. *Why Were DES-Type Drugs Used in Pregnancy?*

Nearly one pregnancy in five results in spontaneous abortion. Various studies suggested that DES-type drugs given to women likely to have miscarriages decreased the incidence of abortion. Additional investigation indicated that pregnant women with more than one prior miscarriage, diabetes, or toxemia of pregnancy also could benefit from DES administration. These findings were widely publicized during 1940s and 1950s, and prenatal administration of DES-type drugs was extensive.

Later studies disclosed that the administration of DES during pregnancy was less effective than initially thought. Additional clinical research and development of newer compounds gradually diminished their use.

III. *What Is the Cancer Problem Associated With In Utero Exposure?*

In 1971, Drs. Arthur L. Herbst, Howard Ulfelder and David Poskanzer at Massachusetts

General Hospital and Harvard Medical School reported a link between maternal DES therapy during pregnancy and the later occurrence of clear-cell adenocarcinoma of the vagina in female offspring exposed to the drug *in utero*. This initial report was soon confirmed by others.

Soon after the discovery of the initial cases, a Registry of Clear-Cell Adenocarcinoma of the Genital Tract in Young Females was established by Dr. Herbst and Dr. Robert E. Scully with support from the National Cancer Institute and the American Cancer Society. It now contains varying amounts of data on almost 300 cases from the United States and abroad. Registry address is MARP, Room 303, 5841 Maryland Ave., Chicago, IL 60610.

The patients have ranged in age from 7 to 28 years at the time of diagnosis.

Documentation of exposure to DES-type hormones has been established in two thirds of the fully investigated case histories. Of the vaginal adenocarcinoma cases, more than 80% are known to have been exposed to DES-type hormones.

Because DES-type hormones were not administered to some of the mothers of these cancer patients, factors other than maternal hormone administration also may play a role in the etiology of these cancers.

In all cases for which precise treatment dates are available, the drug was initiated before the 18th week of gestation. Dosages and duration of therapy varied widely. However, as little as 1.5 mg DES administered daily throughout pregnancy was found in one case history to be associated with subsequent cancer in female offspring. Administration of the drug in varying amounts for a week or more during the first trimester also was associated with the subsequent development of cancer.

Cancers related to DES-exposure have not been reported in male offspring.

Although the exact number of pregnant women treated with DES or chemically similar compounds during pregnancy is unknown, it has been estimated to be as many as two million. The risk of developing adenocarcinoma in exposed females under 30 years of age appears to be minimal, in view of the large exposed population and the very rare incidence of the disease so far reported. However, as exposed females grow older, the incidence of cancer related to DES-type drugs may change.

Compiled by the Professional and Public Relations Committee of the DESAD Project (Diethylstilbestrol and Adenosis) of the Division of Cancer Control and Rehabilitation, National Cancer Institute, and by the Office of Cancer Communications, NCI, National Institutes of Health, DHEW.

IV. *Noncancerous Irregularities*

Early in their investigation, Dr. Herbst and associates noted that most of the vaginal and cervical cancers in the exposed females were associated with vaginal adenosis (the presence of glandular epithelium in the vagina). Benign adenosis is found histologically in over 97% of vaginal clear-cell adenocarcinomas, whether or not a history of DES-type drug exposure *in utero* is confirmed. Vaginal adenosis is rare in normal (unexposed) young women.

The results of examinations of females exposed *in utero* to DES-type drugs have been reported in several studies. More than a third of those who were exposed in the first four months of gestation have vaginal adenosis, and more than two thirds have cervical ectropion (the presence of glandular tissue on the portio vaginalis of the cervix).

Other abnormalities seen in these examinations, such as transverse vaginal and cervical ridges, also may be associated with intrauterine exposure to DES-type drugs. These are described by a variety of names—hood, pseudopolyp, rim, collar, cockscomb cervix.

V. *If the Patient Was Exposed to DES-Type Drugs, What Should Be Done?*

All asymptomatic girls who were exposed *in utero* should receive a thorough pelvic examination at menarche or if they have reached 14 years of age. Younger girls should be examined if they develop abnormal bleeding or discharge.

Whenever prenatal exposure is probable, and there are symptoms of discharge, further investigation is imperative, regardless of the patient's age. This investigation should not be concluded until it is certain that no lesion is present.

Before the examination is undertaken, the entire procedure should be thoroughly discussed with the patient (and her mother or father if she is a minor). The examination should include inspection and palpation, Papanicolaou smear (cervix and vagina), and an iodine staining test of the entire cervix and vagina. Abnormal areas, including those that do not stain with iodine, should be biopsied. This procedure can be performed in the physician's office with small biopsy instruments and without significant discomfort.

For the very young patient who has symptoms that require investigation, anesthesia may occasionally be required before an examination. A small speculum permits adequate visualization of

the vagina without undue discomfort in younger patients.

With asymptomatic females, if adequate examination is not possible at the initial visit, vaginal tampons should be used for a few months to allow an adequate examination later without discomfort.

Colposcopy is a useful adjunct to this examination, but it is not essential. Utilizing its low power magnification to examine the vagina and cervix, the physician can identify areas of glandular tissue (adenosis) in the vagina or on the cervix. This identification permits directed rather than "blind" biopsies. Used in conjunction with the iodine staining test and selected biopsy, colposcopy permits precise recording of observed abnormalities and their appraisal at fixed intervals.

VI. *Follow-up Examinations*

The patient exposed to DES-type drugs should be followed on a regular basis. After a normal initial examination, annual pelvic examinations with cervical and vaginal cytology and iodine staining are probably adequate. If any abnormalities are noted during the initial evaluation, more frequent follow-up examinations are suggested (every 3 to 6 months, depending on the severity of the findings).

VII. *Management of Vaginal and Cervical Irregularities Other than Clear-Cell Adenocarcinoma*

Locally destructive measures such as cauterization, cryosurgery, or excision can be utilized if atypical changes such as marked squamous dysplasia or carcinoma *in situ* of the vagina or cervix are found on biopsy.

Optimal management of nonmalignant lesions in females exposed to DES-type drugs *in utero* is uncertain. At the present time, no case has been reported in which vaginal adenosis has progressed to cancer under direct observation. Careful follow-up appears at present to be the most prudent approach to DES-exposed subjects without carcinoma.

There is no evidence to date indicating that use of oral contraceptives by the DES-exposed population would be undesirable. However, they add further hormonal variables to a complex situation and are one more aspect of the problem requiring more information.

The presence of adenosis is not a contraindication to future pregnancy if the woman desires to have children.

VIII. Cancer Diagnosis

The cancers reported in the Registry have been found more often on the cervix or upper anterior vaginal wall than elsewhere. They usually are elevated, soft and friable, with a tendency to invade surrounding tissue early and metastasize through the lymphatic system. The ratio of vaginal to cervical site of origin (classification of the Cancer Committee of the International Federation of Gynecology and Obstetrics) has been approximately 2:1.

Oncology Grand Rounds . . .

Continued from page 332

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Topics in Nuclear Medicine

Continued from page 335

perforation or coexisting pregnancy. Repeat examinations may be performed in questionable cases without increased hazard to the patient or developing fetus.

Peggy A. Domstad, M.D.

CAT Scan . . .

Continued from page 336

present evidence points to calcium and/or albumin and globulin as the responsible products producing the blood's opacity.^{1,2}

Stephen L. Gammill, M.D.

ANSWER: Intracerebral and ventricular hemorrhage.

IX. Cancer Therapy

Decisions regarding mode and extent of therapy in these young women are difficult in themselves and further complicated by emotionally charged issues. Both surgery and high energy radiotherapy potentially can cure the disease. Cancers associated with DES-type drugs may develop in young women primarily in tissues of Mullerian origin—the upper portion of the vagina and the cervix.

Treatment should be highly individualized and is best accomplished by physicians experienced in treating gynecologic cancers.

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DAVID H. TURNER

A New Year Begins

I want to thank the membership of the Tennessee Medical Association for giving me the opportunity to serve as your President this year. I consider it a high honor and privilege; therefore, I will do my utmost to carry out the duties and fulfill the responsibilities to the best of my ability. I will strive to maintain the degree of honor and integrity that has been established by those very able men who have preceded me in this office.

president's page

In the past few years our medical organization on the local, state, and national levels has had to face many difficult problems, some even of a crisis nature. I anticipate that some of these problems will require continued effort on our part and we, of course, will have new and different problems arise. It is my opinion that the issues at the national level are best dealt with by our national organization, the AMA; the issues at the state level are best dealt with by our state organization, the TMA; and our local problems are best dealt with by our local medical societies.

We must stand together and work together in dealing with the ever-changing problems facing the practitioner of medicine today. I feel we can best do this through our federated organization. I want to request each local society to encourage or require each member to also be a member of the TMA and AMA.

Sincerely,

David H. Turner, M.D.

PRESIDENT

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MAY, 1977

editorials

"Wear a Dark Business Suit—"

The term "business suit" carries with it the implication that there is standard dress for the conducting of business, and the corollary is that no business can be conducted unless all parties (the male ones at least) are "properly" dressed. "Properly" has come to mean throughout the "civilized" world a "business suit," with necktie. Since everybody who is anybody the world over wants to appear civilized, for the past century at

least, Chinese, Russians, Black Africans, and so on have been showing up at business and social functions in unaccustomed dress, often less practical and usually, if not always, more somber than their own. Implicit in all this is that the only civilization is (and further extended, always has been) Western Civilization, whatever that is.

The realization (which has come on me increasingly as the years have passed) of the arrogance of that proposition was overwhelming as I stood in the Royal Ontario Museum in Toronto viewing their superb collection of Chinese art works, and it has been reinforced since, notably by two TV programs, one the film *Chaim*, the story of ORT in the Jewish persecution under the Tsars and Hitler, and the other a performance by the Harlem Dance Theater.

A friend who was sharing my thoughts in the museum opined that the arrogance has its roots in religion. What he meant was that the "Christian" West was taught to believe "pagans" could not produce (or even *be*) anything of value, i.e., be civilized. That certainly is part of it. Christian missionaries operating out of a Victorian society imposed more "modest" Western dress on the "natives," often with disastrous consequences health-wise. Unfortunately they were selling a package—if you accept our Christ, you must accept our culture. The term "native" has always carried the connotation of a slur unless applied to oneself or one's own.

But really it is not that simple. The sincerest form of flattery is imitation. The Greeks never tried to impose Greek culture on anybody, yet in the ancient world everybody wanted to be Greek—even the more "practical" Romans, who had their children tutored by Greek slaves. In the same way, the more "backward" nations have seen things of value in Western culture, and have tried to emulate it. What it has had to offer them is mostly a higher standard of living based on convenience inventions. There is nothing wrong with either a higher standard of living or convenience, unless its price is too high. But it is sometimes "a mess of potage."

For many years most of the "Indian" baskets, trinkets, etc. for sale in Cherokee, N.C., have carried a small tag stating that they were made in Japan (now also often in Hong Kong). There have always been a few—and unfortunately progressively fewer—obviously different items of higher quality, made by local craftsmen. A well-made Cherokee basket will literally hold water.

But the elders have complained that no one wants to learn their crafts, or even to learn the Cherokee language. To be accepted, they had to be like other "Americans" (an absurdity I'll allow to pass for the present).

I am persuaded that what was true yesterday will be true tomorrow, and whatever was of true value yesterday will also be of true value tomorrow. It is only our perception of truth and value which changes, sometimes for the better and sometimes for the worse. It is real tragedy when we let the valuable things of the past slip away. It is why we bother to spend time resurrecting history, or visit museums, or read about what our predecessors have perceived about truth and beauty in their day.

Happily, every culture has its traditionalists, the few who keep alive the old ways and the old arts and crafts. From some of them, for example, Alex Haley found his roots. More and more these individuals are seeing their faithfulness bear fruit, to enrich us all, as Western culture accepts and even encourages them. It is a service television has performed for us, and because of it, visitors to this country from other shores are feeling freer to wear their accustomed dress without being an object of curiosity. There is a revived interest by Americans of Indian, African, and other origins in their heritage.

We have so little time. We are so busy, so often doing nothing. So much of the time and energy of our people, particularly our young, is wasted being brutalized by "the tube." That time could be rechanneled into productive activity. But it requires effort. We need to spend more time in a search for truth, which is often well-hidden in a barrage of words, both spoken and written, about traditions, philosophy, and religion. God alone can reveal Himself, and He is the source of all truth. He reveals Himself in many ways, so that, says the apostle Paul, "We are without excuse." We need to distinguish between the valuable and the merely precious. And we need to spend more time developing and using the talents God has given us, to be the unique person He has made each of us to be.

Our Bicentennial celebration has awakened in all of us an interest in our past, whether we are white, black, "red," Oriental, or whatever. Perhaps it has also given our young nation enough of a sense of identity that we can all perfect and enjoy our differences as well as our unity.

J.B.T.

Play It Again, Sam—Right

I do think we have reached the point of too much technique and perfection, and there will be a reaction, the usual thing which happens in our history and in everything. People will again admire performers who can sing out the melody, not just trill around for half an hour or sing loudly the high C's. Make music, instead of having too much technique.

Arthur Rubinstein

The piano artistry of Arthur Rubinstein has always epitomized musicianship for me. One of the noblest works of man is the piano concerto, and nobody plays it quite like Rubinstein. At 90 this remarkable man is as good as ever. Maybe he hits a wrong note now and then, but the melody is still loud and clear, as he demonstrated to everybody's satisfaction in Public Television's special, "Rubinstein at 90."

We would do well to ponder and take to heart the above quoted message of the man who refused to play a work written for him by Stravinsky, using the piano strictly as the percussion instrument it is, because "it is good for percussion, but there is not music in it at all, so I never played it."

Maestro Rubinstein recounts that he was badly taught at the beginning of his career, and early success spoiled him. He loved music and hated to practice, and it was not until he was 45—when he found that to be a success in America, England, and the Scandinavian countries, music had to be played as written—that he began the work necessary to be what he now considers a proper concert pianist.

It is a fact that people—all of us—always want it both ways insofar as possible, and often even when it is not possible. The same people who prate so loudly about the need for the old family doctor (they are often the same ones who scream for busing to properly integrate the schools) will on the other hand rush off to a specialist when they themselves are sick (they also send their children to private—usually non-integrated—schools).

As the Maestro learned, technical proficiency is not a bar to making music. It is possible to make music and play the music as written, otherwise the composer failed in his own message. We doctors are feeling today a reaction against a scientific medicine which for the last half-century has been preoccupied overmuch with technology. The public is not being unreasonable in expecting that we be doctors and scientists at the same

time. And Medicine is working on it. The American Academy of Family Practice is doing its level best to see to it that its members practice good, solid, scientific medicine. But wearing the badge "Family Practitioner" does not make one a "Family Doctor" from the point of view of the patient, any more than living in a hen-house would make him a chicken.

On a recent visit to St. Jude's Hospital in Memphis I was impressed with the concern for the patient demonstrated by doctors on the staff (not "cases"—not even "patients"—but *the patient*). These have to be some of the world's most scientific doctors, and yet the whole thrust is toward the patient as a whole person, and the impact of his disease on his family.

This message has been loud and clear from many of today's medical students and younger physicians. But the problem is twofold. One is that as today's young idealists become tomorrow's busy, hurried, harried practitioners, they tend to take less and less time to be doctors. The other is that from the start some of our colleagues have been otherwise motivated. But for the all of them—us—the answer is the same. From any practical or philosophical base on which we operate—idealism, humanism, pragmatism, Christianity, agnosticism, paganism, whatever—it is ideologically unsound to separate the art and science of medicine. The public's message is that it is economically unsound, too.

We need to make music, and we need to play it right.

J.B.T.

Just "Gorks?"

The mentally retarded may not be able to do everything normal children can; but they have a right to try. They know what they are missing. They know especially when they are missing the fun of play—of competition—of success.

Eunice Kennedy Shriver

Some time ago I got a review book entitled *So Get On With It—A Celebration of Wheelchair Sports*. I was impressed. A short time after that a golf tournament was held in Nashville in which the participants were blind. One of them made a hole in one. Unbelievable. The Easter Seal Camp is operated for crippled children and adults to learn and to practice skills and to compete with those similarly handicapped. Physical activity is therapeutic, and society has really strained itself for the past few decades to bring it to the physi-

cally handicapped. All the above mentioned activities deserve our support.

And then there are the "gorks."

We can all relate to individuals damaged by disease or injury, because we know some sudden misfortune could reduce us to their level—or worse. We would like to have compassionate hands work with us or with our children should catastrophe strike.

But what about the "gorks?"

They are pathetic figures; it is painful for many even to be around them. They make us self-conscious, and too often are objects of derision—open or silent—as witness the term "gork," for example. Mostly they get written off as too dumb to learn or not worth fooling with, as, "They'll never amount to anything, anyhow."

Now I don't think for a moment any of us really thinks that, and in fact in our society teachers patiently and lovingly work with many whom they know will never, probably, amount to anything. But I do think the majority of us have never really considered what is implied in the words of Eunice Shriver, quoted above. I hadn't—and the reason for this editorial is that as I read them this time, the truth of what she says suddenly became clear.

Each year throughout the state the Tennessee Department of Mental Health and Mental Retardation and the Joseph P. Kennedy, Jr. Foundation sponsor the Tennessee Special Olympics Program "to create opportunities for sports training and athletic competition for all retarded children in Tennessee." Physical activity is one of the most successful ways in which to reach these children in the difficult task of building a positive self-image. It should be obvious to us that "they have the right to try."

The program is active over our state, but there are still a lot of children (and adults) who have not had the opportunity to participate. They need our support—not just our money, though they need that—and our interest, as well. The top contestants in local competition will have the opportunity to come to Nashville to be one of the more than 650 athletes who will compete in the annual state meet on May 20-21, to be held at George Peabody College, John Overton High School, and Vanderbilt University.

They are not "just gorks." They are neighbors whom we are to love as ourselves. Many people are working to give them support. Shouldn't we join them?

J.B.T.

To Be Old

There are two ancient black men who clean up around the hospital where I work, and the other day—Good Friday—I said to one of them after he had emptied my wastebasket, “Have a nice Easter.” He brightened, and said, “You too, Doctor. Let’s just be thankful we can do something for ourselves.”

I don’t know what had happened which prompted that statement at that particular time. But I know he meant it with all his heart. It set me thinking what it must be like to be old in a day when so many can be kept alive who are unable to do for themselves, and often have no one to do it for them. The hazards of living are great for any of us. The old can be overwhelmed.

Mugging and robbing the aged is categorized as a “crib crime” because it is “like taking candy from a baby.” Attacks on the elderly, even in broad daylight, are increasing, and more and more our senior citizens are living in fear, afraid to leave their apartments or rooms. I read recently of a youth who had knocked an old woman to the ground and snatched her purse. The judge had let him off with a warning, as “he was young and a first offender.”

I was appalled. What sort of society is it we live in where the life and limb of our peaceful, law-abiding citizens are so lightly regarded, while at the same time we coddle our criminals? Old bones are brittle, and a blow sufficient to fell can snuff out a life. We need to make the punishment fit the crime, sure enough, but an attack of any sort on an old person should be considered aggravated assault and should carry a mandatory prison term. That might make the candy less appealing.

It is true that in retirement areas the old are organizing for their defense. Security measures are being implemented in buildings and warning systems installed. But the initiative for this is their own, and most of the elderly are on fixed incomes and can’t afford that expense. It makes no sense to expend massive effort and funds to keep an octogenarian alive for another few weeks or months and then abandon him as easy prey for street hoodlums.

Let off with a warning, indeed!

J.B.T.



Roots

To the Editor:

Thank you very much for your article on the editorial page of the March issue of the JOURNAL entitled “Roots.” It most certainly represents a realistic assessment of slavery in the many forms in which it exists in human society.

As a black person, “Roots” may have had a different meaning for me than it had for you and millions of other Americans who are not black. However, it is obvious from your article that we share common reactions to the program and its implications for the life of slavery, as well as for everyday life.

Harold W. Jordan, M.D.
Commissioner

State of Tennessee
Department of Mental Health
and Mental Retardation



A. Lynn Herring, age 72. Died March 8, 1977. Graduate of University of Tennessee Medical School. Member of Memphis-Shelby County Medical Society.

Ralph H. Monger, Sr., age 80. Died March 29, 1977. Graduate of University of Tennessee Medical School. Member of Knoxville Academy of Medicine.

J. Floyd Morrow, age 82. Died March 13, 1977. Graduate of University of Cincinnati Medical School. Member of Knoxville Academy of Medicine.

Cecil E. Newell, age 73. Died March 11, 1977. Graduate of University of Virginia Medical School. Member of Chattanooga-Hamilton County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

KNOXVILLE ACADEMY OF MEDICINE

Frank J. Haraf, M.D., Knoxville

David H. Waller, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

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Stanley W. Erwin, M.D., Memphis
Norman B. Fizette, M.D., Memphis
Shang-Po Haung, M.D., Memphis
William V. Shappley, Jr., M.D., Memphis
William W. Taylor, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

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Evelyn J. Davis, M.D., Nashville
Richard M. Heller, M.D., Nashville
Jonathan S. Jacobs, D.M.D., M.D., Nashville
William R. Long, M.D., Nashville
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Roy Lawrence, M.D., Union City

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

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SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

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John Neale, M.D., Johnson City

WARREN COUNTY MEDICAL SOCIETY

Joseph L. Caten, M.D., McMinnville
Thomas L. Hill, M.D., McMinnville
C. Fred Taylor, Jr., M.D., McMinnville

personal news

Ben J. Alper, M.D., of Nashville has been installed as president of the Nashville Society of Internal Medicine. Other officers elected include *Thomas G. Pennington, M.D.,* vice-president and *Robert Doster, M.D.,* secretary-treasurer, both of Nashville.

Three prominent Tennesseans were named recipients of the TMA "Community Service Award" at the TMA Annual Meeting. *Mr. Teddy Bart,* a noted TV-radio personality throughout Middle Tennessee, was honored for his work through the electronic media on in-depth public discussion of medical issues and problems. *Miss Elizabeth Killeffer* of Cookeville was honored for her continuing years of nursing service in Tennessee; at age 78, she remains active in the Upper Cumberland region of Tennessee serving as chairman of the Nursing Volunteers for the Red Cross Blood Mobile. *Mr. Olin Morris,* director of public affairs for WREG-TV in Memphis and

vice-president of the New York Times Broadcasting Service, Inc., was cited for his outstanding work in public service as it relates to the medical community.

The following physicians have been certified as Diplomates of the American Board of Family Practice: *William E. Bost, M.D.,* Oak Ridge; *Joseph H. Crumbliss, M.D.,* Fayette; *Morris N. Dalton, M.D.,* Knoxville; *Lloyd C. Davis, M.D.,* Knoxville; *Robert G. Dennis, M.D.,* Johnson City; *John C. Gaw, M.D.,* McMinnville; *James M. Hudgins, M.D.,* Madison; *Larry C. Huskey, M.D.,* Knoxville; *Thomas A. Jenkins, M.D.,* Oak Ridge; *Douglas W. Ligon, M.D.,* Erin; *Lester F. Littell, Jr., M.D.,* Dayton; *Maurice N. Lowry, M.D.,* Lexington; *Russell W. Mayfield, M.D.,* Bells; *O. L. Merritt, M.D.,* Dandridge; *William G. Morris, M.D.,* Athens; *Kenneth J. Phelps, Jr., M.D.,* Lewisburg; *Clay Renfro, M.D.,* Kingsport; *Albert D. Roke, M.D.,* Surgionsville; *Ralph H. Ruckle, M.D.,* Portland; *Kenneth B. Rule, M.D.,* Knoxville; *Jack C. Stripling, M.D.,* Lexington; *Jesse Lee Walker, M.D.,* Jellico; *James Louis Thomas, M.D.,* Jackson; *Vincent B. Tolley, M.D.,* Sevierville; *Robert T. Tucker, Jr., M.D.,* Jackson; *M. L. Williams, M.D.,* Knoxville; *Charles D. Wohlwend, M.D.,* Knoxville; *Robert H. Wood, Jr., M.D.,* Crossville.

At the TMA Annual Meeting, three physicians received the "Distinguished Service Award," recognizing their contributions to medicine. *Benjamin F. Byrd, Jr., M.D.,* of Nashville was honored for his special contributions to the American Cancer Society. He is the immediate past-president of the ACS and has served as a member of its Board of Directors for the past 12 years. *George T. Proctor, M.D.,* of Springfield was honored for his dedicated service as a medical missionary. In 1966, he and his family moved his practice to Baraka Hospital near Jerusalem, where he worked for three years until his hospital operations were withheld as a result of the Middle East War. He later set up a radiology service at the Baraka Hospital that now serves more than one million people. *William T. Satterfield, Jr., M.D.,* of Memphis was honored for his work in the field of rehabilitation, primarily of stroke patients. He has held the position of Director of the Stroke Unit of the Baptist Memorial Hospital in Memphis since 1971 and in 1975 was named the medical director of the Lamar Unit Rehabilitation Center of that hospital.

Richard O. Cannon II, M.D., of Nashville has been named chairman of the new AMA Committee on Allied Health Education of the Council on Medical Education.

Robert C. Coddington, M.D., of Chattanooga has been reappointed to a four-year term on the Crippled Children's Service Advisory Committee.

Joseph E. Crupie, M.D., of Memphis was installed as president of the Tennessee District Branch of the American Psychiatric Association. Other officers installed at the APA Annual Meeting, held in conjunction with the TMA Annual Meeting, were *Hil-*

ary *Linder, M.D.*, of Memphis, secretary-treasurer; and *John A. Wilson, M.D.*, of Kingsport, president-elect.

Joseph J. Dodds, M.D., of Chattanooga has been installed as president of the Red Bank Hospital Medical Staff. Other officers elected include *Preston C. McDow, M.D.*, of Chattanooga, president-elect; *R. A. Hoppe, M.D.*, of Chattanooga, secretary; and *Arch Y. Smith, M.D.*, of Signal Mountain, treasurer.

Ben D. Hall, M.D., of Johnson City has been named president-elect of the American Society of Internal Medicine.

Grant W. Liddle, M.D., of Nashville has received the 1977 Founder's Award and Medal from the Southern Society for Clinical Investigation.

Hollis C. Miles, M.D., and *Charles P. Oderr, M.D.*, both of Athens, were recently honored by the Sweetwater Valley Medical Auxiliary in recognition of each having served as a physician for over 40 years.

Henry P. Pendergrass, M.D., of Nashville has been named president-elect of the Radiological Society of North America.

Eugene M. Regen, Sr., M.D., of Nashville was elected Tennessee's "Outstanding Physician of the Year" by the TMA House of Delegates. Dr. Regen was honored for his career of excellence and his special contributions in the development of techniques and procedures in orthopedic surgery. Most recently he has developed and put into operation a free ostomy clinic service in Nashville.

Robert T. Tucker, Jr., M.D., of Jackson has been named president of the new Parkway Hospital. Other officers elected include *John Riddler, M.D.*, vice-president and *W. H. Roberts, M.D.*, secretary-treasurer, both of Jackson. Officers of the board of directors include *Jerry Hornsby, M.D.*, chairman; *James Craig, M.D.*, vice-chairman; and *W. H. Roberts, M.D.*, secretary-treasurer, all of Jackson.

David H. Turner, M.D., of Chattanooga was installed as President of the Tennessee Medical Association during the Annual Meeting. *John B. Dorian, M.D.*, of Memphis was elected president-elect. Elected to serve three-year terms on the TMA Board of Trustees were *George W. Holcomb, Jr., M.D.*, of Nashville; *William O. Miller, M.D.*, of Knoxville; *Don J. Russell, M.D.*, of Chattanooga; and *James H. Donnell, M.D.*, of Alamo. Elected to serve a one-year term on the Board was *Robert E. Clendenin, Jr., M.D.*, of Union City, who will fill the unexpired term of president-elect, Dr. Dorian. Re-elected as speaker of the House of Delegates was *William H. Edwards, M.D.*, of Nashville and re-elected as vice-speaker was *Allen S. Edmonson, M.D.*, of Memphis. Elected to serve the Association as regional vice-presidents were *J. Bryan Smalley, M.D.*, of Maryville-East Tennessee; *James C. Bradshaw, M.D.*, of Lebanon-Middle Tennessee; and *Thomas M. Crenshaw, M.D.*, of Humboldt-West Tennessee. Elected to serve as Delegates from Ten-

nessee to the American Medical Association House of Delegates were *A. Roy-Tyrer, M.D.*, of Memphis and *Tom E. Nesbitt, M.D.*, of Nashville. Serving as alternate delegates will be *Hamel B. Eason, M.D.*, of Memphis and *Morse Kochtitzky, M.D.*, of Nashville.

Jesse Walker, M.D., of Jellico has been given the LeRoy B. Stancell award by the East Tennessee Health Improvement Council in recognition of his outstanding regional contribution to the health of citizens.

medical news in tennessee

ETSU Appoints Two New Department Chairmen

Dr. D. P. Culp, president of East Tennessee State University, has appointed Frank M. Shepard, M.D., chairman and professor of the Department of Pediatrics and Lester R. Bryant, M.D., chairman and professor of the Department of Surgery.

Dr. Shepard has held a similar post in the Creighton University School of Medicine in Omaha since 1972. He is a graduate of Vanderbilt University and Vanderbilt Medical School, where, during his undergraduate studies, he received the George F. Baker Scholarship. From 1961-62, he was a research fellow in newborn physiology at the Wenner-Gren Cardiovascular Research Laboratory, Stockholm, Sweden. In 1962 he returned to Vanderbilt, where he was chief resident in pediatrics and a research fellow in newborn physiology.

Dr. Bryant has been professor of surgery and chief of the thoracic surgery section of Louisiana State University College of Medicine since 1974. From 1962-73, he was with the University of Kentucky College of Medicine as professor of surgery, chief of the Division of Thoracic Surgery, and vice-chairman of the Department of Surgery. A native of Louisville, Ky., Dr. Bryant is an honor graduate of the University of Kentucky, where he earned Phi Beta Kappa membership. He received his M.D. degree from the University of Cincinnati and was chief resident surgeon in the Cincinnati school during the 1961-62 academic year. Dr. Bryant is board certified in surgery and thoracic surgery.

Administrative Posts Filled at UTCHS

Two major administrative appointments have been announced at the University of Tennessee Center for the Health Sciences to coordinate the development of the University's health science education programs throughout Tennessee.

Dr. T. Albert Farmer, vice-president for health

affairs of UT and chancellor of the UT Center for the Health Sciences, said Dr. James R. Gay will be named associate vice-president for health affairs and Mr. William R. Rice will become vice-chancellor for administration. The appointments are effective July 1.

Dr. Gay is presently vice-chancellor for administration and Mr. Rice is executive assistant to the vice-chancellor for the UTCHS Knoxville Unit.

As associate vice-president for health affairs, Dr. Gay will assist in developing more effectively the statewide role of the vice-president for health affairs.

Mr. Rice, as vice-chancellor for administration, will be responsible to the chancellor for overall management of the Center for the Health Sciences, including internal operations and management relations with other institutions, hospitals and agencies.

Dr. Gay, who also is professor of neurosurgery in the UT College of Medicine, is a graduate of Virginia Polytechnic Institute and earned his M.D. degree from Johns Hopkins University School of Medicine.

Mr. Rice, a native of Gastonia, N.C., graduated from the University of North Carolina and earned his J.D. degree from the University of Tennessee College of Law.

UTCHS Names Acting Dean

Dr. E. William Rosenberg has been named acting dean of the University of Tennessee Center for Health Sciences College of Medicine. Prior to this appointment, Dr. Rosenberg was executive assistant to the dean and chairman of the dermatology division.

national news

From the AMA's Office in Washington, D.C.

Medicare-Medicaid Fraud and Abuse

In the name of the "sunshine law," the government released the names of physicians, groups, and laboratories that did more than \$100,000 in Medicare business last year. It marked the first breach in the Medicare program's longstanding policy against disclosing such information.

The over-\$100,000 category included 409 physicians, 1,752 medical groups, and 58 laboratories. This compared to 2,533 physicians, dentists, and pharmacies listed in the latest Medicaid report of more than \$100,000 intake last November.

The American Medical Association branded the releasing of the names as "only serving to badger a large segment of the profession and to establish

guilt by innuendo." AMA Executive Vice-President James Sammons, M.D., said "there is a basic dishonesty in the broadcast release of the names of individuals receiving Medicare payments." Dr. Sammons added that if "HEW thinks any physician on this list is guilty of fraud HEW should say so. We will assist in any case where there is good reason to suspect wrongdoing."

Dr. Sammons said the physicians are identified by HEW as individual recipients of Medicare funds, whereas the payments are often for services provided by many others as well. Many of the physicians listed are hospital-based radiologists, pathologists, anesthesiologists, he said. "We would also point out that these services are paid for at a rate set by Medicare and based on prevailing charges two years out of date."

Predictably, press reaction was uneven. Some press took the trouble to check before using the story. Most press did not. All too typical were headlines like this one, from the *Fort Lauderdale Sun-Sentinel*:

"HEW RELEASES NAMES OF DOCTORS ON MEDICARE GRAVY TRAIN."

Few stories bothered to explain that the figures cited are gross, not net; or that HEW's dollar totals included not only payments to the physician but payments made directly to the beneficiary where the beneficiary is responsible for paying the physician's bill.

Having gone through a similar experience in November of 1976, when the Social and Rehabilitation Service made public a list of physicians, dentists, pharmacies and laboratories that had received \$100,000 or more from Medicaid in 1975, the AMA immediately began checking for accuracy as many as possible of the names and amounts listed as paid to solo practitioners.

By press time, some 166 physicians listed in solo practice were contacted in 30 states and the District of Columbia. Of this group:

- 82 were incorrectly listed as solo practitioners;
- 5 had incorrect amounts attributed paid to them;
- 22 reported both the solo designation and the amount were incorrect.

Some 65.7% of the information released on the 409 physicians listed as solo practitioners was therefore incorrect.

Complaints from individual physicians victimized by these inaccuracies poured in to the press. A roundup by the *Associated Press* pointed out some of the injustices done by the HEW release in which two out of three solo practitioners were inaccurately listed.

The *Washington Star* took editorial note of HEW's inaccuracies under the heading: "A SLOPPY PIECE OF WORK."

The physicians contacted by the AMA and state medical societies reported harassment by angry patients, crank telephone calls, children taunted at school as the children of a crook, anonymous

threats, attacks by colleagues, and continuing embarrassment within their communities.

A number of congressmen have inserted remarks into the *Congressional Record* with respect to HEW's disgraceful performance.

HEW Secretary Joseph A. Califano has privately admitted dismay and has publicly stated that a corrected list will be forthcoming shortly.

The AMA has told the government that fraud and abuse are different problems deserving different treatment.

In a letter to HEW Secretary Califano, the AMA said: "Frankly, we find it difficult to equate 'abuse' of Medicare and Medicaid programs with some legally definable criminal action. Indeed, it is unfortunate that 'fraud and abuse' have been linked so often in public discussion and departmental releases that the clearly criminal aspects of 'fraud' have migrated to 'abuse' as well."

AMA Executive Vice President James Sammons, M.D., said "fraud" is a reasonably well-defined legal concept—misrepresentation with the intent to obtain money or other goods to which one is not entitled—and has always been clearly subject to legal penalties. Dr. Sammons said examples include billing for services not rendered, etc. "The medical profession has always opposed such practices by its members and urges prosecution of those charged with fraud.

However, he wrote, abuse is a much more ambiguous term. A "fact sheet" on Medicaid fraud and abuse issued by the Social and Rehabilitation Service states that a provider is "abusing" the program if he files claims and receives payment for services "that are not allowed by federal or state Medicaid laws or regulations." If "abuse" of a program by a provider implies some guilt on his part, this definition is clearly inadequate, since it leaves out any reference to the provider's knowledge of the exclusion, noted Dr. Sammons.

The AMA said the decision as to appropriateness of care "is a professional decision, not a legal one, and we would strongly urge that no attempt be made to bring it within the courtroom, along with prosecution of fraud." Legitimacy and appropriateness of treatment should first be explored by the review committees already established for this purpose at the community level, said Dr. Sammons. "When they agree that the treatment is, indeed, inappropriate and excessive, efforts should be made by his peers to persuade the erring physician to follow a more appropriate course of treatment, but the punitive action should be limited to those already authorized by law—non-reimbursement of excess care and, where the pattern of over-use or over-treatment continues, exclusion of the individual from the program."

He concluded, "We believe that this is both appropriate and sufficient in the way of penalty for actions which the physician himself may consider honest and non-culpable, and we would therefore

urge that, while fraud should indeed be prosecuted to the extent of the law, "abuse," in this sense, should be handled within the framework of Peer Review and program administration controls."

A bill aimed at rooting out fraud and abuse in federal health programs has started down the legislative path in Congress. The AMA applauded the objective, but said the bill is so broadly drawn that it allows investigation of "the actions of almost every practicing physician in the United States."

The minority of physicians who abuse Medicare and Medicaid should be brought to justice, the AMA said, but "justice is not served if all practitioners are subjected to harassment and restraint so that a few malefactors may be apprehended."

Edgar T. Beddingfield, M.D., Chairman of the AMA's Council on Legislation, testified before an unusual joint hearing by the health subcommittees of the House Ways and Means and House Commerce Committees. Ways and Means is responsible for Medicare; Commerce, for Medicaid.

To the extent that the legislation was aimed at the "Medicaid mill" it has "far exceeded the mark," said Dr. Beddingfield. "Since this bill has been characterized as the 'Medicaid mill' Fraud and Abuse Bill, practically all group practices could be stigmatized because of the broad application of its provisions."

The broad approach of the bill is "aimed at a large proportion of all practicing physicians, casting its stigma of impropriety upon the tens of thousands of physicians who fall within its purview," the AMA witness said. "Virtually all group practices in the United States would be subjected to the same requirements as the so-called Medicaid mill."

All groups of two or more practitioners would be subject to the extensive disclosure of records provisions, Dr. Beddingfield noted, adding that all practicing physicians who render Medicare and Medicaid services would be subject to review by Professional Standards Review Organizations (PSRO).

Continuing his criticism of the legislation, Dr. Beddingfield said it "endangers the confidentiality of patient records, and certain provisions cannot be justified as needed or even as a wise tool to combat fraud."

To counter charges that his Department has been lax in cracking down on fraud and abuse in health programs, HEW Secretary Califano has called in the FBI.

He said FBI agents will work "full blast" on Medicare and Medicaid misdoings until HEW's own office of investigations is "up to full speed."

Califano made the statements following a report by the Senate Special Committee on Aging contending that illegal kickbacks are "rampant" in the Medicaid program. Summarizing testimony given the Committee last year, the report said nursing homes are the chief offenders, but "increasing evi-

dence points to hospitals, medical practitioners, clinical laboratories and other suppliers."

Not making Califano's life any easier was an allegation by John Walsh, former director of HEW's Office of Investigations, that the new HEW Secretary and his Under-Secretary Designate, Hale Champion, tried to impede an investigation of fraud in a San Jose, Cal., Medicaid project. Walsh, who resigned his post, said he was told he had to clear the investigation with his superiors. Califano and Champion angrily denied they were in any way attempting to influence the course of the probe.

"I did not in any way hinder or impede our fraud investigation—nor did Mr. Champion—in California or elsewhere," Califano said on NBC's "Meet the Press" program. "Everything that I've done in this area has been designed to make those investigations go faster and better."

AMA Attacks Violence on TV

The weight of scientific evidence points to a relationship between television violence and increased aggressive behavior in some youthful viewers, the AMA has told Congress.

The AMA called on the TV industry to recognize its social responsibilities, reduce the amount of violence, and respond with greater sensitivity and diversity in its programming policies. "That television violence represents a serious issue in the mind of the public is a consideration the broadcasting industry can no longer ignore," declared Robert Stubblefield, M.D., consultant on mental health matters to the AMA.

Testifying before the House Commerce Subcommittee on Communications, Dr. Stubblefield said "television could teach many positive lessons and behavior that would provide alternatives to the violent and antisocial problem-solving so often conveyed in today's programming."

Violence now is a prevalent theme on TV, said the AMA spokesman. He noted earlier testimony of George Gerbner, Ph.D., that there was more violence during the fall season programming than at any other time in the past decade.

Said Dr. Stubblefield: "These results are especially alarming since just three years ago network executives assured another Congressional subcommittee that efforts were well under way to reduce the amount of gratuitous violence."

The AMA believes that the television medium "has not even begun to realize its potential" in "pro-social programming," he said.

"In my opinion," Stubblefield added, "the television industry cannot have it both ways—claiming that they merely entertain, facilitate abreaction and ventilation of pent-up emotions, yet denying that they shape and influence behavior. Bluntly stated, shaping and influencing behavior that is stimulating the sale of products is precisely one of the major uses of television."

New FDA Commissioner Appointed

The new Commissioner of the Food and Drug Administration is Donald Kennedy, Ph.D., a neuro-physiologist from Stanford University. Dr. Kennedy is the first non-physician to head the agency in 11 years but he doesn't place much significance in that fact.

"I've been active in the community of neuro-physiologists for some time. About half my colleagues who are good scientists have M.D.s, the other half have Ph.Ds. If I didn't know something about their personal histories I wouldn't know, from their ability to do what they do, which was which. In other words, you can be a good scientist with either degree. Furthermore, I don't think an M.D. confers you with an automatic set of prejudices about regulation either."

HEW Secretary Califano praised Dr. Kennedy in announcing the appointment and said "it is imperative that the FDA act only in the public interest and with much greater dispatch than it has in the recent past."

Responding to a query on FDA's legendary speed Dr. Kennedy said, "I think anyone would like to see a larger amount of dispatch per unit of protection. Obviously, the first thing one wants to look at in any agency is how it is going to pursue its fixed responsibilities with great alacrity. The classical regulatory dilemma is that on the one hand there is the wish to minimize the public cost of too speedy introduction. On the other hand you'd like to be able to figure the opportunity-cost that you're paying in delayed innovation. It's no trick to describe the problem. The trick is to measure it for any given case."

HEW Fills Inspector General Post

Thomas D. Morris, a member of the senior staff of the Brookings Institution was named to the newly created post of Inspector General of HEW.

The job was established by Congress last year to oversee a \$25 million program, to find fraud and abuse in various HEW programs, especially Medicaid. Morris will have a staff of 1,000 auditors and 100 investigators.

Morris, 63, was Assistant Secretary of Defense in charge of the cost reduction program and procurement operations from 1961 to 1968 and was Assistant Comptroller General from 1970 to 1975. For the past year, he has been a senior staff member of the Brookings Institution in Washington.

Morris will focus initially on the broad area of health-care services, including alleged widespread fraud in the Medicare and Medicaid programs, and the student loan programs.

Morris will be responsible both to the HEW Secretary and to Congress. The importance of the post was underlined by having the announcement of Morris' appointment come from the White House rather than the Secretary's office.

announcements

NATIONAL

1977

- May 25-28 American College of Sports Medicine, Marriott, Chicago
- May 29- June 3 American Association on Mental Deficiency, Fairmont, New Orleans
- May 30- June 1 American Ophthalmological Society, The Homestead, Hot Springs, Virginia
- May 31- June 2 Society of Neurological Surgeons, Rochester, Minnesota
- June 5-7 American Diabetes Association, Stouffer's Riverfront Inn, St. Louis
- June 5-9 National Intravenous Therapy Association, Marriott Hotel, New Orleans
- June 18-23 American Medical Association, Fairmont, San Francisco
- June 20-22 American Neurological Association, Palmer House, Chicago
- June 28- July 4 International College of Surgeons, U.S. Section, New York
- July 31- Aug. 5 International Congress of Group Psychotherapy, Sheraton Hotel, Philadelphia
- July 31- Aug. 5 National Medical Association, Bonaventure Hotel, Los Angeles

STATE

- June 15-16 Upper Cumberland Medical Society, Hotel Donoho, Red Boiling Springs

NOTICE

By Resolution of the Board of Directors, the name of the Shelby County Foundation for Medical Care, Inc., has been changed to the MID-SOUTH FOUNDATION FOR MEDICAL CARE, INC. This change is effective immediately. Please change your records to read as follows:

Tennessee PSRO Area I

**MID-SOUTH FOUNDATION
FOR MEDICAL CARE, INC.**
969 Madison Avenue, Suite 1300
MEMPHIS, TENNESSEE 38104

PHONE: (901) 523-9420

Is there a tablet containing only
an expectorant and only
Glyceryl Guaiacolate? **YES!**

1. Patient acceptable tablet dose.
2. Single entity expectorant.
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4. Sugar-free tablet.

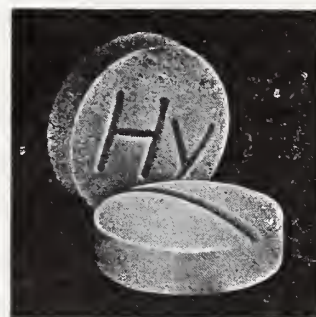
An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)

Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscid fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** Adults—1 tablet four times daily. Children—6 to 12 years of age; ½ tablet 3 or 4 times daily. **HOW SUPPLIED:** White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. Literature Available: On request.

Available through all drug wholesalers.



HYREX COMPANY
832 South Cooper
Memphis, Tenn. 38104



continuing education opportunities

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.

Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule

May 25-26	Sixteenth Annual Seminar in Psychiatry, Frank Luton, M.D.
June 20-22	Symposium on Impedance Screening in Children, Bill Wilkerson Hearing & Speech Center, Fred Bess, Ph.D.; Charles Bluestone, M.D.; Jerome Klein, M.D.; Earl Harford, Ph.D.
Aug.-Sept.	Internal Medicine Intensive Review (11 sessions), Paul E. Slaton, M.D.
Sept. 23-24	Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.
September	Annual Wm. F. Orr Lectureship in Psychiatry, Marc Hollender, M.D.
Oct. 17-22	Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

**UNIVERSITY OF TENNESSEE
COLLEGE OF MEDICINE**

Continuing Education Schedule 1977

May 23-27 Intensive Review of Anesthesiology,
Memphis

May 25-28 Basic Clinical Electrocardiography,
Paris Landing Inn (Pickwick Lake)

For information contact: Division of Continuing
Education and Conferences, UTCHS, 800 Madison
Ave., Memphis, TN 38163

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

**Mini-Residencies for Medical and Surgical
Practitioners in Office Management
Of Emotional Problems**

The objective of this course is to give physicians
an ideal emotional counseling technique that fits
busy office practices. The technique uses a concept
of emotions that is consistent with human anatomy
and psycho-physiology. Yet, the technique requires
no more physician time or patient cost than routine
evaluations of new patients. Finally, the technique is
readily understandable and easy for practitioners to
apply.

One, two and three week courses. Minimum of
40 hours per week. *Tuition Fee:* \$350 per week for
the 1st & 2nd week of training; \$500 for 3rd week
of supervised practice with patients in the Intensive
RBT Treatment Program.

For further information contact: Maxie C.
Maultsby, Jr., M.D., Office of Continuing Medical
Education, Dept. of RBT, University of Kentucky,
Lexington, KY 40506.

Continuing Education Programs

**International Conference on the
Clinical Uses of CEA**

June 1-3, 1977—Hyatt Regency, Lexington, KY.

This conference will bring together a distinguished
faculty to assess the current clinical uses of carcino-
embryonic antigen (CEA) assays in the management
of cancer patients, and discuss various new ap-
proaches to measure and detect CEA and related
substances in body fluids and tissues. *Credit:* 16
hours Category 1. *Fee:* \$75.

For further information contact: Frank R. Lemon,
M.D., Continuing Education, College of Medicine,
University of Kentucky, Lexington, KY 40506.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS

**Regional Meetings,
Postgraduate Courses**

The ACP Regional Meetings, lasting one to four
days, are designed for practicing internists and phy-
sicians in related specialties.

The ACP Postgraduate Courses provide the op-
portunity for in-depth study in a wide range of
topics related to internal medicine and its sub-
specialties. Averaging three to five days, they are
directed toward practicing physicians and are pre-
sented in association with medical schools and other
teaching institutions.

ACP Regional Meetings and ACP Postgraduate
Courses have been approved by the American
Medical Association Advisory Committee on Con-
tinuing Medical Education. They fulfill Category 1
requirements for the AMA Physician's Recognition
Award.

For information and registration contact: Regis-
trar, Postgraduate Courses, ACP, 4200 Pine St.,
Philadelphia, PA 19104.

Selected Topics in Endocrinology and Metabolism

June 1-3, 1977—Hilton Hotel, Indianapolis.

This course will review information in the field
of endocrinology and metabolism from the stand-
point of the practicing internist. Particular attention
will be paid to recent diagnostic and therapeutic
advances, with background information provided to
place newer developments in perspective.

A Review of Internal Medicine—1977

June 2-4, 1977—Texas Medical Center, Houston

Designed to update knowledge in internal medi-
cine for generalists and internists, this course will
be especially valuable for candidates preparing to
take the American Board of Internal Medicine
examination this fall.

Clinical Cardiology

June 6-8, 1977—Hotel Leows La-Cite, Montreal.

Three areas to be considered at this course are
hypertension, coronary artery disease, and con-
genital cardiology as it pertains to the practicing
physician dealing with adults. Lectures and discus-
sions will be held in the morning, with afternoon
sessions devoted to workshop-type meetings.

Advances in Clinical Gastroenterology

June 6-9, 1977—Yale University, New Haven, CT.

Designed for practicing physicians preparing for
examinations, this course—through lectures and case
discussions—will underline the many diagnostic,
therapeutic, and conceptual advances of the past
few years in the field of gastroenterology.

Advances in Internal Medicine— Perspectives and Horizons

June 13-17, 1977—Banff Centre for Continuing Education, Alberta, Canada

This course, designed for the clinician internist, will include recent advances in pathophysiology and therapy of a broad variety of disease entities. Although broadly based in all specialties, special attention will be given to recent advances in immunologic and renal disease, pulmonary and cardiac disease, hematology, oncology, and endocrinology.

Special ACP-MKSAP Courses

The ACP will sponsor 23 courses, providing intensive review of the entire spectrum of medicine, over a five-day (30 hour) period. These courses will differ from any ever presented in that they complement self-learning activities (through the ACP Medical Knowledge Self-Assessment Program—IV) and will also serve to prepare physicians for this fall's American Board of Internal Medicine recertification examination.

MKSAP Course Schedule

August

- | | |
|--------|---|
| 15-19 | Atlanta, GA
Burlington, VT
New York, NY |
| 22-26 | Birmingham, AL |
| 29-9/2 | Baltimore, MD
Seattle, WA |

September

- | | |
|-------|---|
| 7-11 | Ann Arbor, MI
Richmond, VA
San Francisco, CA |
| 14-18 | Kansas City, MO |
| 26-30 | Cambridge, MA
Los Angeles, CA
Philadelphia, PA
Rochester, MN
Washington, DC |

October

- | | |
|-------|---|
| 1-5 | Montauk, LI, NY |
| 3-7 | Cincinnati, OH
Denver, CO
Houston, TX
Pittsburgh, PA |
| 10-14 | Chicago, IL |
| 17-21 | Cleveland, OH
New Orleans, LA |

A catalog on the courses is available by writing: Registrar, ACP-MKSAP Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

AMERICAN COLLEGE OF CHEST PHYSICIANS

Continuing Education Programs

Lung Cancer

June 2-3, 1977—Mayo Clinic, Rochester, MN.

This course will present a comprehensive overview of the current knowledge concerning the management of bronchogenic carcinoma. The first day will be devoted to epidemiology, pathology, and various diagnostic techniques. Discussions will take place on the second day, consisting of an assessment of modern therapy including resective surgery, cryosurgery, radiotherapy, chemotherapy, and immunotherapy, alone and in different combinations.

Chronic Obstructive Pulmonary Disease

June 16-18, 1977—Washington Plaza Hotel, Seattle.

Of special interest to the practicing physician, this program will emphasize management problems and rehabilitation of chronic bronchitis and emphysema patients. After a review of pathophysiology, natural history, and diagnostic methods, specific patient problems and complications will be addressed.

Current Status and Controversies in Pacemaking

June 23-25, 1977—Hilton Head Inn, Hilton Head, SC.

Designed for cardiologists, surgeons, and others involved in the clinical use of cardiac pacemakers, this program's objective is to increase the practitioner's technical understanding of pacing, in order to enhance his clinical skill and his ability to analyze and resolve problems encountered in diagnosing, implanting, and follow-up with the pacemaker patient.

For further information on ACCP programs contact: Dale E. Brady, Director of CME, ACCP, 911 Busse Hwy., Park Ridge, IL 60068.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

Practice Management and Economic Seminar Schedule

- | | |
|------------|--------------------|
| June 18-25 | Madrid, Spain |
| Aug. 20-27 | Rome, Italy |
| Oct. 2-9 | Key Biscayne, Fla. |

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- | | |
|-----------|---|
| May 16-29 | Ovarian Cancer: Diagnosis and Treatment of Common Epithelial Tumors, with Hugh R. K. Barber, M.D., Director of Obstetrics and Gynecology, |
|-----------|---|

Lenox Hill Hospital; President, New York City Division, American Cancer Society. Cosponsored by the ACS for AMA Category 1 credit. Also accepted for 1 hour of Elective credit by the AAFP.

Gait: Normal and Abnormal, with Robert S. Siffert, M.D., Chairman, Department of Orthopaedics, Mount Sinai School of Medicine, New York.

May 30-

June 12

The Diagnosis of Hyperthyroidism: A Decade of Progress, with Sidney H. Ingbar, M.D., Chief of the Division of Liver Diseases of Mount Sinai School of Medicine of the City University of New York.

June 13-

July 10

Atopic Dermatitis and the Beta Adrenergic Theory, with Andor Szentivanyi, M.D., Chairman, Department of Pharmacology, University of South Florida,

Tampa; and E. William Rosenberg, M.D., Dean, School of Medicine, University of Tennessee, Memphis.

Evaluating Patients with Occlusive Cerebrovascular Disease, with Noble David, M.D., Chief, Neurology Service, Miami Veterans Administration Hospital.

INSTITUTE FOR SEX RESEARCH

Eighth Annual Summer Program In Human Sexuality

July 20-29, 1977—*Indiana University, Bloomington.*

Designed for individuals in the health professions and related fields, this course includes lectures, panel discussions, audiovisual materials, and attitude reassessment workshops covering sex behavior, sociosexual issues, and special sexual problem areas. *Contact:* Institute for Sex Research—Summer Program, 416 Morrison Hall, Indiana University, Bloomington 47401.

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ACCREDITED BY THE J. C. A. H.

PLAN NOW TO ATTEND

EAST TENNESSEE EMERGENCY MEDICAL SYMPOSIUM

IN CONJUNCTION WITH THE TENNESSEE MEDICAL ASSOCIATION

September 8, 9, and 10, 1977

Holiday Inn, Gatlinburg, Tennessee

Cosponsors: Tennessee Department of Emergency Medical Services; Tennessee Chapter, American College of Emergency Physicians; Tennessee Emergency Department Nurses Association; Tennessee Emergency Medical Technicians Association; Physicians Medical Education and Research Fund; and the Trauma Committee, Tennessee Chapter of the American College of Surgeons.

Two and one-half days of lectures and demonstrations featuring the very latest techniques in emergency medical care. A partial listing of topics to be covered include:

- ***** Treatment of Multi-tranquilized Patients
- ***** Treatment of Shock
- ***** MAST Suit Demonstration
- ***** Psychiatric Emergencies
- ***** EMT Emergencies
- ***** Esophageal Airway Demonstration
- ***** Telemetry
- ***** Neurosurgical Emergencies
- ***** Acute Respiratory Failure
- ***** Injuries to the Thoracic Aorta
- ***** Pre-hospital Emergency Care of Burns
- ***** Recognition and Management of Splinting
- ***** Cardio-pulmonary Resuscitation
- ***** Many, many more timely topics

An outstanding faculty has been engaged to present these and many other timely topics. Plan to attend this Symposium, then journey to Knoxville Saturday night to see Johnny Majors and his 1977 Vols do battle with the University of California. A limited number of rooms has been reserved at the Gatlinburg Holiday Inn. Please make your motel accommodations directly. A printed program will be mailed in early July.

For further information, address correspondence to East Tennessee Emergency Medical Symposium, P. O. Box 77, Knoxville, Tennessee 37901.



US—AND THE AMA

There is a growing tendency lately to accept fragmentation of medicine—to confine our interests and activities to the narrow concerns of our special field, even to our own little niche in that field. We see economic and political issues through the distorted lens of our self interest. Each specialty society believes that its problems are unique and frequently can best be solved by innovative legislative and regulatory interaction (which translated, means "making a deal.") And we ask, Who needs the AMA? What can the AMA do for us?

Medicine has never before been under such concentrated, persistent and coordinated attack by government—not just pathology, but all of medicine. We are accused by one arm of government of attempting to restrict the training of new physicians and influence their choice of specialty, and by another arm of government of *not* restricting and controlling the supply of physicians. Social Security demands uniformity of fees, while the Federal Trade Commission sues to prevent the use of relative value schedules. We are told that standards of physician training are not high enough and that we must insure ongoing competence by continuing education and periodic examination. At the same time, we are attacked because those without even the basic qualification of a medical degree claim they have been unfairly prevented from performing medical functions.

President Carter has made it pretty clear that he will take an active stance on health issues. His attitude toward our profession is ambiguous and possibly antagonistic. CLIA and the Talmadge Amendments were postponed, but now must be dealt with. We can expect a drive for a far more repressive and arbitrary health planning act (which comes up for renewal in 1977), possibly including an amendment mandating all states to regulate health care rates.

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Each specialty has a few unique problems, but we have far more problems in common with all other physicians. To deal effectively with these problems, we need to work together and we need to speak with one clear voice. The coordinator of our efforts and a clear voice for all medicine is the American Medical Association. How effectively can the AMA resist all these threats? Consider what it achieved in the last Congress. As the objective *National Journal* stated, the AMA got the fangs taken out of health manpower legislation. It got the law amended to permit statewide PSROs and affirm the limitation of review to samples. It got the HMO Act amended so that individual employees (including union members) can decide on their own whether to enroll in an HMO. It helped hold the line on National Health Insurance.

During the 94th Congress the College worked very closely with the AMA. I am sure that we achieved far more by this cooperation than we could have achieved by ourselves. The AMA has been concerned about our problems, responsive to our needs, and supportive of our efforts in dealing with government. To continue this mutually beneficial cooperation, we must be sure that the AMA remains strong and vigorous. If you are not a member of the AMA, join! If you are a member, take action! Our future as physicians depends to a significant degree on how well we maintain a strong unified front. Our future and the future of the AMA are inseparable.

Dennis B. Dorsey, M.D.

President, College of American Pathologists

CONFERENCES FOR MEDICAL PROFESSIONALS

A calendar listing of over 500 national/international meetings, conferences and seminars in the medical sciences for 1977. All medical specialties included. Send a \$10.00 check or money order payable to Professional Calendars, P.O. Box 40083, Washington, D.C. 20016

PREVENTING PROFESSIONAL ASSAULT

Congressman Paul Simon (D-24) of Illinois gave the following four ways to prevent assaults on your profession at the AMA's recent National Leadership Conference:

1. The public must perceive that you are not abusing the privileges of your profession.
2. The public must perceive that you care about the public, not just your own economic interests.
3. You must strive for a higher ethic than the public imposes upon you.
4. You must look at the long-range picture and become a leader in the progress of your profession. Don't live from crisis to crisis, but think of the long range goal of improving the society as a whole.

Thyroid Experts Discredit Breast Cancer-Hormone Link

The theory that thyroid supplements lead to breast cancer is unproved. Patients taking thyroid hormones should continue to take their medicine. This is the conclusion of the American Thyroid Association in a special communication in the April 4 issue of *JAMA*.

A research report in the *JAMA* last September had indicated that breast cancer was high among individuals taking thyroid supplements. A group of eight physicians from the Education Committee of the American Thyroid Association, headquartered at the Mayo Clinic, Rochester, Minn., evaluated the report as well as many other research reports on possible links between thyroid supplementation and breast cancer.

Studies dealing with the question give conflicting results, they said. British and American studies had failed to establish a link. Japanese researchers reported some correlation between thyroid supplements and breast cancer.

The doctors cited many gaps in the conduct of the September study that they felt invalidated its findings. "In contrast to the highly tenuous nature of the relationship between thyroid hormone therapy and breast cancer, the adverse, and often serious, effects of withholding specific therapy in patients with hypothyroidism are unquestioned," they said. "The American Thyroid Association recommends, therefore, that patients who are taking thyroid hormones for well-established indications continue to take their medication." The Association also called for more research to find a definitive answer.

In another report in the same issue of *JAMA*, researchers from the University of California at San Francisco analyzed the study published last September in detail, and concluded that it does not contain information that would link thyroid hormones to breast cancer.

Prevention of Food Poisoning Is Goal of New AMA Pamphlet

Food poisoning makes a lot of Americans very sick each year. Most of it is unnecessary. Salmonella infection alone is estimated to affect more than a million Americans each year. It brings diarrhea, severe stomach pains, vomiting and fever. It is seldom fatal but is highly uncomfortable for a day or two.

The nation's foremost food hazard continues to be microbial food poisoning, says a new pamphlet on foodborne illness prepared by the AMA.

The major cause is faulty food-handling practices in the home and in public eating places. The number of outbreaks indicates clearly that many

consumers know too little about the prevention of foodborne illness.

The pamphlet, "Foodborne Illness: The Consumer's Role in Its Prevention," prepared by the AMA's Department of Foods and Nutrition, describes four major types of food poisoning and offers suggestions on how to avoid it. Salmonella organisms are found most frequently on raw animal products—meats, poultry and eggs. Refrigeration and freezing retard their growth, and cooking destroys the organisms. To prevent growth and spread of Salmonella, use hot, soapy water to wash hands, utensils, cutting boards or counter tops that have been in contact with raw meats, poultry and eggs; thaw frozen meats in the refrigerator, not at room temperature; do not stuff poultry until just prior to cooking, and use a meat thermometer to make certain the fowl is thoroughly cooked; refrigerate leftovers promptly and heat them thoroughly before serving; use clean eggs without cracked shells.

To prevent illness from Staphylococcus aureus organisms, do not keep foods at room temperature or at warm holding temperatures; do not use hands to mix foods, and keep hands away from mouth, nose and hair; any person with a skin infection or infectious disease should not prepare food. The staph toxin, unlike bacteria, is not destroyed by cooking. Foods that support the growth of staph organisms are ham, cream-filled pastries, custard, egg dishes, gravies, stuffing, and meat and poultry dishes.

Cooked meat and poultry dishes and gravies also may harbor Clostridium perfringens spores. Abdominal cramps and diarrhea develop about 10 to 12 hours after eating. Prevention involves frequent washing of hands while preparing food, prompt refrigeration and thorough reheating of leftovers, and care to avoid cross-contamination, as in Salmonella.

The most serious food poisoning is caused by a bacterium known as Clostridium botulinum (Botulism). Botulism is rare, but often is fatal. The major cause is eating improperly processed, home-canned vegetables. It results in double vision, inability to swallow, speech difficulty, and progressive respiratory paralysis. To prevent Botulism, use only the pressure-canner method of canning vegetables, meats, or poultry at home and obtain reliable canning instructions, such as those available from the US Department of Agriculture; throw out foods with odd odors; do not even taste food that is suspect; if doubtful, boil meats, poultry, corn or spinach for 20 minutes and other vegetables at least 10 minutes; discard cans that leak or bulge.

Doctors Make 17 Million House Calls Annually

The most recent statistics available showing more than 17 million house calls made annually in the United States mean that about 2% of all physician services are being delivered at home. Granted, that number is between a third and a quarter of the 63 million house calls made 20 years ago.

Patients of all income levels are visited at home. About 40% of those seen are in families with an annual income of less than \$5,000 and another 40% are in families earning \$10,000 and more. A further breakdown shows 25% of the doctors' house calls are in homes of less than \$3,000 annual income and 21% take place in homes where the annual income exceeds \$15,000. Patients in the \$5,000 to \$10,000 income bracket account for about 20% of all house calls.

Visits to elderly patients—persons 65 and older—are the most prevalent, accounting for 51% of all house calls. Persons in the 45 to 65 age bracket are the home patients 25% of the time, with illnesses of children from ages 5 through 14 being the reason doctors go to the home 7% of the time. All other age groups combined accounted for the remaining 17% of physician visits to the home. Of those patients seen at home, 56% are disabled or limited in activity, with 44% having no problems of limitation.

The vast majority (70%) of house calls are made in cities, with rural patients accounting for 27% of the total number made, and farm family members representing 3% of the home visits by physicians. Almost half (44%) of the house calls are made in the northeastern region of the United States, with the north, central, and southern states residents accounting for 23% each, and visits by doctors in western states providing the remaining 10%.

General practitioners or family physicians are the groups visiting the homes most often—77% of the time, with internists providing 8% of the house call care and all other specialists representing the remaining 15% of home visits.

Study Technique for Birth Defects In Unborn Infants Declared Safe

Amniocentesis properly performed involves negligible risk and is most useful in identifying potentially defective children well before birth, says a research report in the March 28 issue of *JAMA*.

There has been some element of risk in the procedure, and many physicians have been reluctant to suggest amniocentesis for their patients, says Arthur I. Goldstein, M.D., and colleagues of the University of California College of Medicine at Irvine.

The risk of complications has been less than 1%, but even this low figure can be reduced through techniques studied in 120 amniocentesises performed at the University of California Irvine Medical Center.

Timing of the procedure is important, and the Irvine group determined that 16 weeks' gestation is the safest time. Preliminary study by ultrasound methods shows the doctor exactly where the fetus is located within the sac and thus permits insertion of the needle without possible danger. The procedure should be done only by personnel trained and experienced in the technique.

Women who become pregnant after the age of 40 years have a higher risk of giving birth to a

malformed infant, and women of all ages with certain inborn characteristics also are at risk.

Five of 118 successful amniocentesises at the Irvine center revealed that the expected child would be born defective, he reports.

Many Doctors Practicing "Defensive Medicine," AMA Poll Shows

Three out of four American physicians are practicing "defensive medicine"—that is, ordering extra tests and procedures for patients—as a protection against potential malpractice suits, according to an AMA poll. And the medical bills of the patients are increasing as a result.

More than 90% of the poll respondents indicate they are more conscious today than in the past that they may later be sued for malpractice. A sizeable number of the doctors say they are ordering one or two more extra tests—X-rays, laboratory tests, other diagnostic procedures, and some are ordering three or four more tests.

Not only are patients paying for more tests, but three out of five doctors say they had raised their own fees in the last year because of increasing malpractice premiums.

Clinical Center Study of Patients With Gynecomastia

The cooperation of physicians is requested in the referral of patients with gynecomastia for a study being conducted by the Reproduction Research Branch, National Institute of Child Health and Human Development at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients will receive a complete endocrine evaluation. Reduction mammoplasty will be offered following evaluation.

Physicians interested in having their patients considered for admission may write or telephone: Dr. D. Lynn Loriaux, Endocrinology Service Unit, National Institute of Child Health and Human Development, NIH, Clinical Center Room 10B-09, Bethesda, MD 20014; Telephone: (301) 496-4686.

Clinical Center Study of Patients With Sickle Cell Anemia

The cooperation of physicians is requested in the referral of patients with sickle cell anemia for studies being conducted by the Clinical Hematology Branch of the National Heart, Lung, and Blood Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients with a spectrum of clinical severity are needed to test whether newly developed methods of measuring whole blood oxygenation and sickling are of use as indicators of clinical status and prognosis. Exercise performance is quantitatively evaluated by treadmill testing and correlated with *in vitro* tests of blood oxygenation, sickling, and degree of anemia.

We are also seeking patients who require frequent blood transfusion for control of pain or severe anemia in attempts to determine transfusion regimens that will maintain optimal blood oxygenation.

Physicians interested in further details or who wish to refer a patient may write or telephone: Robert M. Winslow, M.D., Clinical Hematology Branch, National Heart, Lung, and Blood Institute, NIH, Building 10, Room 7D-15, Bethesda, MD 20014; Telephone: (301) 496-3676 (office); (301) 997-4039 (home).

Clinical Center Study of Patients With Diabetes Mellitus and Insulin Allergy or Insulin Resistance

The cooperation of physicians is requested in the referral of patients with diabetes mellitus and insulin allergy or insulin resistance for studies at the Clinical Center, National Institutes of Health, Bethesda, Md. These studies are being conducted in collaboration with the National Institute of Allergy and Infectious Diseases and the National Institute of Arthritis, Metabolism and Digestive Diseases.

Patients over 12 years of age with diabetes mellitus and any form of insulin allergy or with diabetes mellitus and insulin resistance (insulin requirement > 200 units/day) are eligible. All patients will receive a complete evaluation of both the humoral and cellular aspects of their immune response and attempts will be made to desensitize appropriate patients.

Physicians who are interested in further details or wish to refer a patient may write or telephone: Alan Rosenthal, M.D., Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Diseases, NIH, Building 10, Room 11N-224, Bethesda, MD 20014; Telephone: (301) 496-2165.

Technique To Help Patients Relax

In a scientific report on relaxation therapy and high blood pressure in the March issue of *Archives of General Psychiatry*, C. Barr Taylor, M.D., and colleagues describe how they taught patients to bring down blood pressure by a simple technique of relaxing, in a research study at Stanford University Medical Center, California.

At the first session, patients were told that relaxation reduces blood pressure, but only if the doctor's instructions are followed. The doctor then answered the patient's questions and asked them to assume a comfortable position.

Then followed a program of tensing and relaxing major muscle groups, beginning with the arms, moving to the head, neck and so on, followed by deep, slow breathing, while imagining a pleasant, peaceful scene of their own choosing. The patients were told to practice these techniques once a day. In tense situations during the day, they were told to take a deep breath, hold it momentarily, and to

imagine they were in a peaceful place. Then think the word "relax" as they slowly exhaled.

The technique worked, Dr. Taylor found. Those practicing relaxation therapy had a much better reduction in blood pressure than control groups.

Self-Instructional Booklets Available From DHEW

A series of self-instructional booklets on male and female sterilization have been published by the Bureau of Community Health Services, Department of Health, Education and Welfare. They are designed to help the patient learn about sterilization.

After reading the entire booklet, the patient will be able to discuss the subject, describe the procedures, list the various steps in the operation, label a diagram used in pictorially presenting the surgical procedure and even answer the many questions other people may ask about voluntary sterilization.

Two booklets in the series are now completed and can be ordered from the National Clearinghouse for Family Planning Information, P.O. Box 2555, Rockville, MD 20852. Refer to *Understanding Female Sterilization*, #HSA 76-16025 and *A Male Sterilization Procedure*, HSA 76-16026.

Award-Winning Film, Educational Program Available on Hyponatremia

A new teaching module, including an award-winning film on fluid and electrolyte balance and the various disease mechanisms associated with hyponatremia, is now available from Searle Laboratories for use in hospitals, medical schools, medical meetings and seminars.

Called "The Sea Within Us," the 27-minute, 16-mm film features Dr. Robert W. Schrier, professor of medicine, University of Colorado School of Medicine, and is accompanied by a 64-page monograph.

The film can be obtained on free loan with accompanying monographs by writing to the Professional Education Department, Searle Laboratories, Box 5110, Chicago, IL 60680.

New Guidelines Offered For X-Rays of Breast

Recent publicity about potential dangers of mammography screening has generated an emotional reaction in both lay and professional circles. Mammography means X-ray of the breast to determine whether cancer is present. Use of diagnostic X-ray when indicated is not in question. The problem comes in the mass screening by X-ray of women who have no symptoms and are not in the high risk groups.

The danger comes from the possibility that the X-ray itself may cause cancer.

American women and often their physicians as well are in a quandary over whether to use X-ray to check for cancer.

There still are some unknown factors in this situation, but, given the present state of medical knowledge, some practical guidelines for mammography are offered in the March 7 issue of *JAMA* by researchers from the Scripps Clinic and Research Foundation, LaJolla, Cal.:

1. Any woman, regardless of age, with signs or symptoms that indicate breast cancer (such as a lump) should have a mammograph.

2. A woman who has a high risk for breast cancer (strong family history, previous breast cancer, no pregnancy before 30 years of age) should receive periodic screening examinations, including mammography.

3. Periodic screening should be done for all women over the age of 50 years.

4. Women under 50 years without symptoms should not be screened until further facts are discovered on the benefits and risks.

Harold M. Swartz, M.D., and Barbara A. Reichling of the Scripps Clinic point out that "for any individual woman, the risk of inducing breast cancer by mammography is very low." Mammographs, they say, should be made only with modern equipment and techniques designed to provide optimum information with minimal dose.

In another report in the same issue of *JAMA*, Gerson J. Lesnick, M.D., of Mount Sinai School of Medicine, New York City, reports that X-rays of the breast are of little value in detecting cancer in women under 45 years. In a group of 106 patients under 45 years, 84% had first detected the tumors themselves. Another 14% were discovered by physicians on routine physical examinations.

A third report from Maurice M. Black, M.D., of the New York Medical College, New York City, reveals that there was a great surge of demand for mammography recently, following the public disclosure that the wives of the President and the Vice President of the United States had been treated for breast cancer.

But, says Dr. Black, there was virtually no impact on the rate of diagnosis and cure of breast cancer.

In an accompanying editorial, John C. Bailar III, M.D., of the National Institute of Health, Bethesda,

Md., recommended a somewhat higher age—60 to 65—for the beginning of periodic screening of women without symptoms.

Rough estimates indicate that the present practice of mammography used as preventive screening may eventually induce some breast cancers if it is used indiscriminately to examine all women more than 35 years of age, says Dr. Bailar. Older women probably benefit more from mammography than they lose, he says.

Mammography remains a precious tool in the diagnosis of breast cancer; it is well, however, that the medical profession takes such a careful look not only at the usefulness but also at the safety of this procedure.

New Criteria Listed For Brain Death

Criteria for determining when the brain is truly dead, even though machines may be keeping the heart beating and the lungs breathing, are listed in the March 7 issue of *JAMA*.

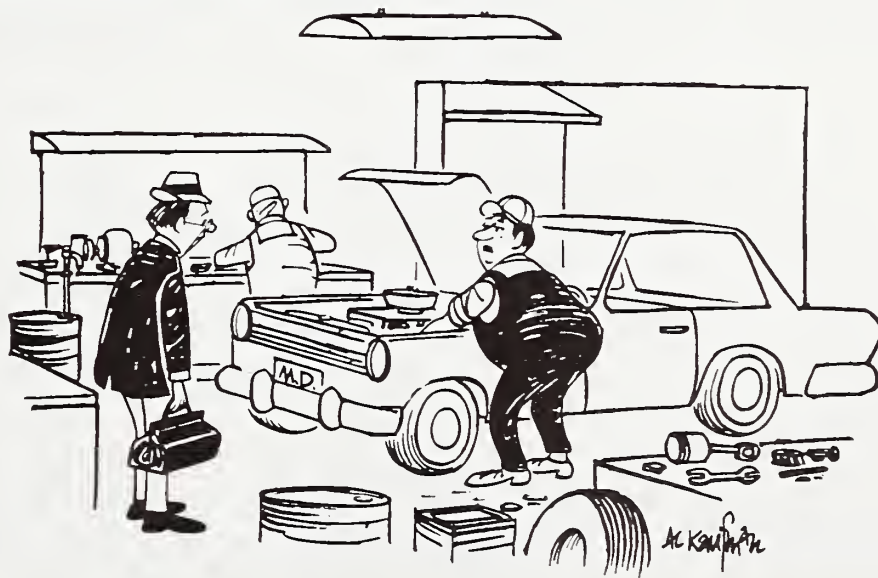
The National Institute of Neurological and Communicative Disorders and Stroke sponsored a study in which 503 patients were examined in nine medical centers. The study concluded that establishment of cerebral death requires:

1. All appropriate examinations and treatment procedures have been performed.

2. The brain is completely unresponsive, breathing without the machines has stopped, pupils are dilated, reflexes such as blinking are missing, and the electrocardiogram is silent for 30 minutes at least six hours after the stroke or accident.

3. If one of these standards is met imprecisely or cannot be tested, a confirmatory test be made to demonstrate the absence of blood flow in the brain.

The third rule would allow the diagnosis of a dead brain to be made in patients with small amounts of sedative drugs in the blood, in patients undergoing treatment procedures that make examination of cranial nerves impossible, and in patients otherwise meeting the criteria but whose pupils are not dilated.



"Go home and get some rest. You can't do any good here."

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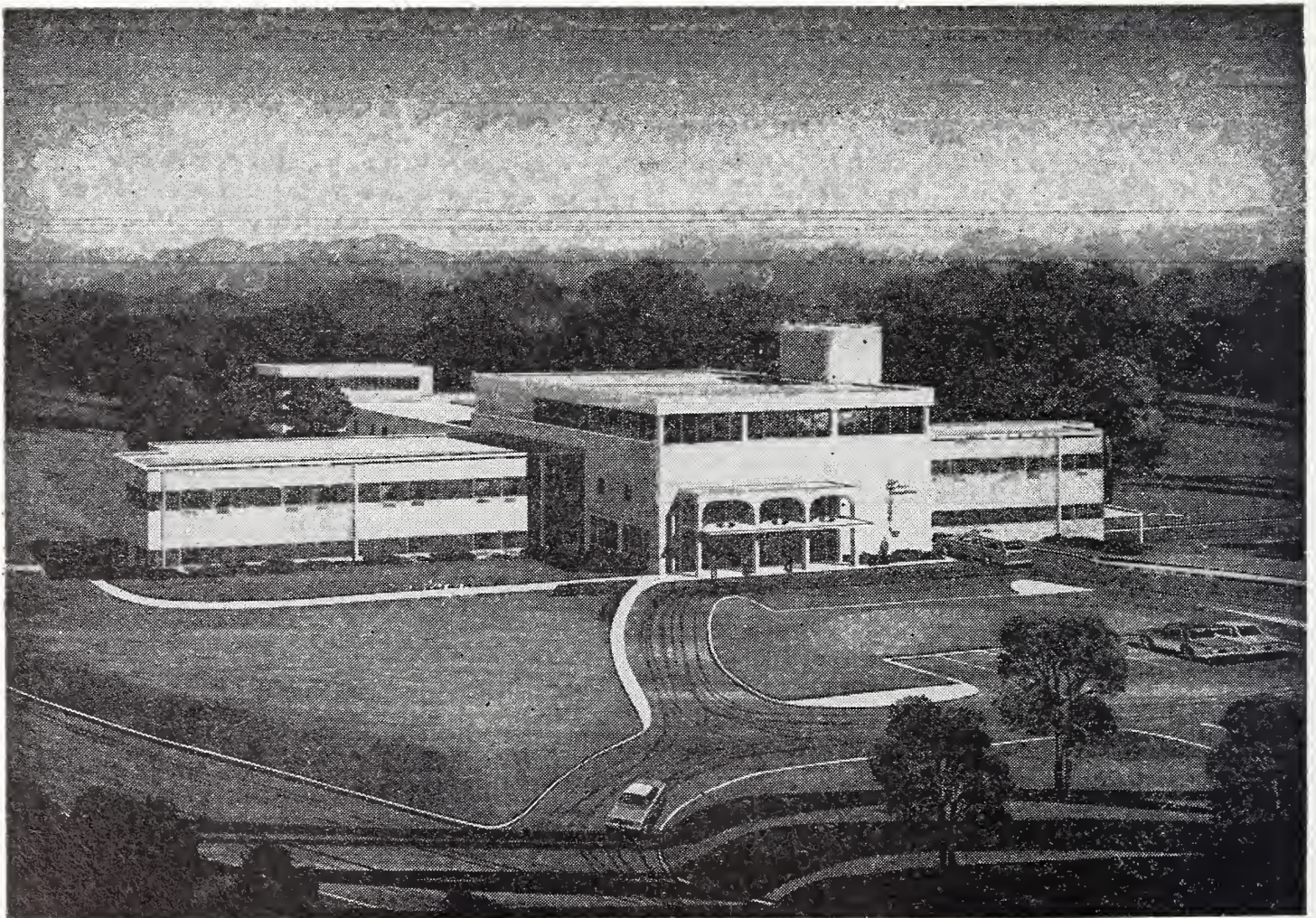
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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

SUSTAINED ACTION



WARNER/CHILCOTT
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T-GP-72-

*Abstract of the Proceedings of the House of Delegates
Of the Tennessee Medical Association
Nashville, Tennessee—April 13-16, 1977*

The 142nd Annual Meeting of the Tennessee Medical Association was conducted in Nashville, Tennessee, April 13-16, 1977, with headquarters in the Hyatt Regency Hotel. The House of Delegates met initially at 4:00 p.m., April 13, 1977, with Dr. William H. Edwards, Nashville, presiding as Speaker of the House and Dr. Allen S. Edmonson, Memphis, as Vice-Speaker.

At the opening session, Dr. John H. Burkhart, Knoxville, gave the invocation: "Almighty God, our Father, we thank you for your presence in all of our affairs; for your concern in our activities; for your ultimate control over our destinies. As we come together once again to represent a profession established we believe by a high and noble cause to serve, may we and those who share with us in the endeavor be blessed by your approval. Wherein we have your favor, inspire us to continue; wherein we deviate from what you would have us be and do, restrain us; correct us, instruct us. As laborers in the service of the Supreme Physician, if our actions and efforts are not in your behalf and to your satisfaction, they are truly without redeeming value. May whatever we do as this House of Delegates listens, deliberates, and acts, be done to the greater glory of God, and to the larger benefit of all mankind. Amen."

REPORT OF THE COMMITTEE
ON CREDENTIALS

Dr. Thomas R. Duncan, Columbia, Committee on Credentials, reported that there was a quorum present. He reported that there were 105 members of the House of Delegates present. The Speaker declared the House was in session.

1976 MINUTES APPROVED

The Speaker announced that an abstract of the minutes of the last regular session of the House of Delegates were reproduced in the June, 1976 issue of the JOURNAL of TMA. It was moved and seconded that the abstracted minutes of the 1976 session of the House of Delegates be approved as published in the June, 1976 issue of the JOURNAL. **The motion was adopted.**

REFERENCE COMMITTEES

The Speaker announced the personnel of the reference committees to consider reports, resolutions, amendments, and all matters requiring action by the House of Delegates.

REFERENCE COMMITTEE
ON CREDENTIALS

Thomas R. Duncan, M.D., Columbia, *Chairman*
H. Barrett Heywood, III, M.D., Chattanooga
Paul H. Williams, M.D., Memphis

REFERENCE COMMITTEE ON
AMENDMENTS TO THE
CONSTITUTION AND BY-LAWS

John H. Burkhart, M.D., Knoxville, *Chairman*
J. Howard Ragsdale, M.D., Union City
Sarah H. Sell, M.D., Nashville

REFERENCE COMMITTEE A

John L. Sawyers, M.D., Nashville, *Chairman*
John D. Pigott, M.D., Memphis
Don J. Russell, M.D., Chattanooga

REFERENCE COMMITTEE B

Francis H. Cole, M.D., Memphis, *Chairman*

James N. Proffitt, M.D., Maryville
Howard L. Salyer, M.D., Nashville

REFERENCE COMMITTEE C

William O. Miller, M.D., Knoxville, *Chairman*
Wilford H. Gragg, Jr., M.D., Memphis
C. C. Woodcock, M.D., Nashville

REFERENCE COMMITTEE D

Hamel B. Eason, M.D., Memphis, *Chairman*
Charles E. Allen, M.D., Johnson City
Will G. Quarles, M.D., Livingston

REFERENCE COMMITTEE ON OUTSTANDING PHYSICIAN OF THE YEAR AWARD

Morse Kochtitzky, M.D., Nashville, *Chairman*
J. Kelley Avery, M.D., Union City
E. Kent Carter, M.D., Kingsport

NOMINATING COMMITTEE

As required in the By-Laws, the Board of Trustees, in its January meeting, appointed a Nominating Committee with representatives from each of the three grand divisions of the state. The Speaker announced the personnel of the Committee.

MIDDLE TENNESSEE

Bernard S. Davison, M.D., Murfreesboro
Malcolm R. Lewis, M.D., Nashville
Clarence R. Sanders, M.D., Gallatin

EAST TENNESSEE

John H. Burkhart, M.D., Knoxville
David P. McCallie, M.D., Chattanooga
Gilbert A. Rannick, M.D., Johnson City

WEST TENNESSEE

Thomas K. Ballard, M.D., Jackson
Arden J. Butler, Jr., M.D., Ripley
Tinnin Martin, Jr., M.D., Memphis

ELECTION OF OFFICERS AND COUNCILORS APRIL 16, 1977

The report of the Nominating Committee was presented in the second session of the House of Delegates on Saturday, April 16, 1977. Nominees submitted by the Committee were voted upon individually and in each instance, the Speaker

called for additional nominations from the floor. Those elected were:

President-Elect—John B. Dorian, M.D., Memphis

Speaker—House of Delegates—William H. Edwards, M.D., Nashville

Vice-Speaker—House of Delegates—Allen S. Edmonson, M.D., Memphis

Vice-President (Middle Tennessee)—James C. Bradshaw, M.D., Lebanon

Vice-President (West Tennessee)—Thomas M. Crenshaw, M.D., Humboldt

Vice-President (East Tennessee)—J. Bryan Smalley, M.D., Maryville

AMA Delegate (West Tennessee)—A. Roy Tyrer, Jr., M.D., Memphis (January 1, 1978-December 31, 1979)

AMA Alternate Delegate (West Tennessee)—Hamel B. Eason, M.D., Memphis (January 1, 1978-December 31, 1979)

AMA Delegate (Middle Tennessee)—Tom E. Nesbitt, M.D., Nashville (January 1, 1978-December 31, 1979)

AMA Alternate Delegate (Middle Tennessee)—Morse Kochtitzky, M.D., Nashville (January 1, 1978-December 31, 1979)

TRUSTEES

Middle Tennessee:

George W. Holcomb, Jr., M.D., Nashville (1980)

East Tennessee:

William O. Miller, M.D., Knoxville (1980)

Don J. Russell, M.D., Chattanooga (1980)

West Tennessee:

James H. Donnell, M.D., Alamo (1980)

Robert E. Clendenin, Jr., M.D., Union City (1978)

COUNCILORS

Second District—Felix G. Line, M.D., Knoxville (1979)

Fourth District—Donald H. Bradley, M.D., Sparta (1979)

Sixth District—Charles M. Hamilton, M.D., Nashville (1979)

Eighth District—Charles W. White, M.D., Lexington (1979)

Tenth District—James B. Witherington, M.D., Memphis (1979)

Nominees for the Public Health Council: (Three from West Tennessee, one of whom will be subsequently appointed by the governor.)

Moore Moore, Jr., M.D., Memphis
George D. Dodson, Jr., M.D., Jackson
Robert L. Harrington, M.D., Dyersburg

Nominees for the Public Health Council: (Three from East Tennessee, one of whom will be subsequently appointed by the governor.)

Burgin E. Dossett, Jr., M.D., Johnson City
Nat E. Hyder, Jr., M.D., Johnson City
John B. McKinnon, Jr., M.D., Johnson City

Nominees for the Advisory Board for Tuberculosis Control: (Three from East Tennessee, one of whom will be subsequently appointed by the governor.)

Charles L. Roach, M.D., Sevierville
William P. Bailey, Jr., M.D., Johnson City
Warren B. Henry, M.D., Chattanooga

THE ABOVE WERE NOMINATED BY THE HOUSE OF DELEGATES.

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Speaker reported that there was one amendment to the Constitution and four amendments to the By-Laws to be considered by the House.

AMENDMENT TO THE CONSTITUTION CA—NO. 1-77

This amendment was introduced to amend Article IV, Section 3 of the Constitution of the Tennessee Medical Association by deleting from the first sentence the words "Veterans Administration," and in Section 4 by adding at the end of the present section the following wording: "Members who have attained age 70 in the previous calendar year, or age 65 if fully retired, may be elected Veteran Members for the current and subsequent years. Members who are not practicing medicine because of impaired health may be elected Veteran Members during the first year of disability and thereafter for as long as the disability exists."

As amended, Constitution Amendment No. 1-77 is as follows:

Section 3. Associate members shall be commissioned officers in active service of the U.S. Armed Forces and Public Health Service, residing in the state, who are elected to member-

ship by a component Society and certified to the Secretary of the State Association as Associate Members. Such physicians may be eligible for active membership, if otherwise qualified.

Section 4. Veteran Members are those who, because of age or impaired health, have been elected Veteran Members of their component Societies, and who are so certified to the State Association annually by the component Societies. **Members who have attained age 70 in the previous calendar year, or age 65 if fully retired, may be elected Veteran Members for the current and subsequent years. Members who are not practicing medicine because of impaired health may be elected Veteran Members during the first year of disability and thereafter for as long as the disability exists.**

ACTION: ADOPTED AS AMENDED (Lying on the table to be acted upon during the 143rd Annual Meeting in Knoxville, Tenn., April 12, 1978.)

AMENDMENTS TO THE BY-LAWS BA—NO. 1-77

The Reference Committee on Amendments to the Constitution and By-Laws amended Chapter II, Section 1 of the By-Laws of the Tennessee Medical Association by deleting the entire section as it is now written and substituting the following: "The Association shall hold an Annual Meeting on the dates and at such place as has been fixed by the Board of Trustees. The Annual Meeting shall rotate if possible within the three grand divisions of the state. The House of Delegates shall meet annually at the place and time of the Annual Meeting of the Association, and at such other times and places as the Board of Trustees deems appropriate. Scientific Meetings of the Association shall be held in conjunction with the Annual Meeting or separate from it at the discretion of the Board of Trustees, and additional Scientific Meetings may be held at other times and locations at the discretion of the Board of Trustees."

As amended, By-Laws Amendment No. 1-77 is as follows:

Section 1. The Association shall hold an Annual Meeting on the dates and at such place as has been fixed by the Board of Trustees. The Annual Meeting shall rotate if possible within the three grand divisions of the state. The House of Delegates shall meet annually at the place and

time of the Annual Meeting of the Association, and at such other times and places as the Board of Trustees deems appropriate. Scientific Meetings of the Association shall be held in conjunction with the Annual Meeting or separate from it at the discretion of the Board of Trustees, and additional Scientific Meetings may be held at other times and locations at the discretion of the Board of Trustees.

ACTION: ADOPTED AS AMENDED

BA—NO. 2-77

This amendment was introduced to amend Chapter III, Section 1 of the By-Laws of the Tennessee Medical Association by inserting in the first sentence between the words "Veteran Members" and "Student Members" the words "Intern and Resident Members."

As amended, By-Laws Amendment No. 2-77 is as follows:

Section 1. The General Meeting shall include all registered Active Members, Associate Members, Veteran Members, **Intern and Resident Members**, Student Members, Honorary Members and guests, all of whom shall have equal rights to participate in the proceedings and discussions. Each General Meeting shall be presided over by the President, or, in his absence or disability, or by his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the Annual Address of the President and the annual orations; and the entire time of the meeting, so far as possible, shall be devoted to papers and discussions, clinics, and demonstrations, relating to scientific medicine.

ACTION: ADOPTED AS AMENDED

BA—NO. 3-77

This amendment was introduced to amend Chapter VI, Section 3 of the By-Laws of the Tennessee Medical Association by adding to the third sentence the words "Federally-insured" and "or Savings and Loan Association."

As amended, By-Laws Amendment No. 3-77 is as follows:

Section 3. The Secretary-Treasurer shall give bond for the trust reposed in him, for such amount as the remaining members of the Board of Trustees may name, said bond to be made by a regular bonding company, and paid for by

the Association. He shall demand and receive all funds due the Association, together with bequests and donations. All funds shall be deposited in a **Federally-insured** State or National Bank or **Savings and Loan Association**. He shall pay money out of the treasury on bills certified to by him or the Executive Director of the Association only, he shall subject his accounts to such examination as the House of Delegates may order; he shall annually render an account of his acts and of the state of the funds in his hands.

ACTION: ADOPTED AS AMENDED

BA—NO. 4-77

This amendment was introduced to amend Chapter XII, Section 3 of the By-Laws of the Tennessee Medical Association by deleting the present first two sentences and substituting as follows: "Every reputable physician who is legally licensed and registered in Tennessee, or any other state of the United States, who is practicing or who will agree to practice nonsectarian medicine, shall be eligible for membership. Each component Society shall judge the individual qualifications of its members."

As amended, By-Laws Amendment No. 4-77 is as follows:

Section 3. Every reputable physician who is legally licensed and registered in Tennessee, or any other state of the United States, who is practicing or who will agree to practice nonsectarian medicine, shall be eligible for membership. Each component Society shall judge the individual qualifications of its members. Only licensed and registered physicians who are Active, Veteran, or Intern or Resident members and who are members in good standing of the Tennessee Medical Association may be elected to office in a component Society or to represent it in the House of Delegates of the Tennessee Medical Association. Each component Society of this Association may amend its constitution and/or by-laws to provide that the payment of dues to the American Medical Association shall be a condition of active membership in that Society. Before a charter is issued to any component Society, full, and ample notice and opportunity shall be given to every such physician in the County to become a member.

ACTION: ADOPTED AS AMENDED

RESOLUTIONS

The reference committees have the option of recommending a resolution for adoption or rejection, for adoption as amended or substituted for referral, or for no action. The resolutions that follow are as amended, and in the form in which the House of Delegates **adopted, referred, or rejected** them.

RESOLUTION NO. 1-77

TMA Medical Student Members

By: BOARD OF TRUSTEES

TENNESSEE MEDICAL ASSOCIATION

WHEREAS, The Tennessee Medical Association has a medical student membership category; and

WHEREAS, These medical students do not currently have full membership privileges in the Association; and

WHEREAS, Today's medical students are tomorrow's physicians; and

WHEREAS, By encouraging and supporting them we are making an investment in our future as well as theirs; and

WHEREAS, Approximately 250 medical students, enrolled in Tennessee medical schools, voluntarily joined organized medicine in 1976 by direct membership in the American Medical Association; and

WHEREAS, The medical student membership potential in Tennessee presents the opportunity for the TMA to have a fifth delegate to the AMA House of Delegates in the very near future. Now, therefore be it

RESOLVED, That the By-Laws of the Tennessee Medical Association be amended to make medical student members eligible to vote and hold office; and be it further

RESOLVED, That the component medical societies be encouraged to consider a similar amendment to their by-laws to accommodate this resolution; and be it further

RESOLVED, That the Board of Trustees and the Committee on Constitution and By-Laws be instructed to devise methods by which housestaff members and student members can participate in the business affairs of the Tennessee Medical Association.

Reference Committee B—recommended adoption of Resolution No. 1-77 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 2-77

Delivery of Primary Health Care

By: BOARD OF TRUSTEES

TENNESSEE MEDICAL ASSOCIATION

WHEREAS, The East Tennessee Health Systems Agency has been instrumental in establishing an Association of Primary Health Care Providers; and

WHEREAS, This association is comprised of persons employed by the Tennessee Department of Public Health, nurse practitioners, local health councils and

agencies, community health centers, physicians, and others; and

WHEREAS, It appears that this association was established to aid public health workers, nurse practitioners, nurses and others in the delivery of primary care in Tennessee; and

WHEREAS, This type of activity could remove the responsibility for primary care from the hands of the physician, and in some instances placing it in the hands of non-medical personnel; and

WHEREAS, The Tennessee Medical Association and the Tennessee Nurses Association adopted a statement on joint practice which in part states that medical and nursing services are complementary but are not interchangeable either in responsibility or accountability. Now, therefore be it

RESOLVED, That primary health care cannot be effectively provided in the best interest of the patient without physician participation; and

RESOLVED, That the Tennessee Medical Association go on record as opposing the efforts of non-physician groups and agencies to assume the responsibilities for primary medical care in Tennessee; and be it further

RESOLVED, That a copy of this resolution be forwarded to the agencies and councils involved as well as the commissioner of public health for the State of Tennessee.

Reference Committee A—recommended adoption of amended Resolution 2-77.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 3-77

License Renewal Application of 1977

By: WARREN COUNTY MEDICAL SOCIETY

WHEREAS, The Tennessee Department of Public Health, Center for Health Statistics, through the State Licensing Board for the Healing Arts, in its recent mailings of health professional annual license renewal forms included a license renewal questionnaire; and

WHEREAS, The questions asked were not necessary for the determination of license renewal; and

WHEREAS, In the mailing the State Center for Health Statistics did not clearly state that the completion of the questionnaire was voluntary; and

WHEREAS, We find this action to be unconscionable infringement upon the privacy of the health professionals. Now, therefore be it

RESOLVED, That the House of Delegates of the Tennessee Medical Association request that the State Licensing Board for the Healing Arts cease the mailing of license renewal forms with any and all other questionnaires, forms and materials not required by law for annual registration, and be it further

RESOLVED, That the Tennessee Medical Association so notify other health professional groups of this action and solicit their support to achieve this rectification.

Reference Committee A—recommended that Resolution 3-77 be adopted as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 4-77

Tennessee Medical Association Auxiliary
By: KNOXVILLE ACADEMY OF MEDICINE

WHEREAS, The Tennessee Medical Association Auxiliary for 50 years has assisted the Tennessee Medical Association in its programs to advance medical care and improve the public health; and

WHEREAS, The cultivation of good relations and promotion of mutual understanding among physicians and their families has been accomplished through the efforts of the Tennessee Medical Association Auxiliary; and

WHEREAS, The Tennessee Medical Association has been a much better organization through the tireless efforts of the Auxiliary. Now, therefore be it

RESOLVED, That the Tennessee Medical Association express to the Tennessee Medical Association Auxiliary its profound gratitude for all of their accomplishments, their devotion to us, their outstanding leadership and assistance to the Tennessee Medical Association; and be it further

RESOLVED, That the Tennessee Medical Association solicits their continued support to continue to try to improve health care in Tennessee and our relationship with the public which we serve; and be it further

RESOLVED, That the Tennessee Medical Association will endeavor to assist the Auxiliary to make their organization function as effectively as possible.

Reference Committee D—recommends adoption of Resolution 4-77.

ACTION: ADOPTED

RESOLUTION NO. 5-77

Medical Licensure Exemptions
By: C. RICHARD TREADWAY, M.D.

WHEREAS, The medical schools and their affiliated hospitals of this state have an obligation to provide for their medical interns, residents, and clinical fellows a sound level of experience prior to their assuming positions in medical practice; and

WHEREAS, The medical schools of this state should be able to take full advantage of highly qualified foreign physicians on visiting scholar programs who participate in the training of these future physicians; and

WHEREAS, Current laws relative to licensure of physicians by the State Licensing Board for the Healing Arts do not afford appropriate flexibility to permit the medical schools either to utilize these highly qualified visiting physicians or to permit medical interns, residents, and clinical fellows to train during their residency. Now, therefore be it

RESOLVED, That the House of Delegates of the Tennessee Medical Association recommends that medical interns, residents, and clinical fellows participating in the residency programs approved by the American Medical Association, performing duties assigned to meet the requirements of such programs, and supervised by licensed physicians, be exempt from the licensing requirements in Tennessee; and be it further

RESOLVED, That the Tennessee Medical Association

recommends that visiting foreign medical faculty deemed qualified by the State Board of Medical Examiners and employed full time by medical schools or their affiliated hospitals in Tennessee, and practicing only in conjunction with their faculty role, be exempt from the licensing requirements in Tennessee for a period not to exceed two years; and be it further

RESOLVED, That the Tennessee Medical Association support the legislation proposed by the Board of Medical Examiners which amends House Bill 774 and Senate Bill 720 (Attachment A).

ATTACHMENT A SENATE BILL NO. 720

AN ACT to amend Tennessee Code Annotated Section 63-605 to provide an exemption from licensing and certification of fitness for medical interns, residents, clinical fellows, and visiting medical faculty under specified conditions.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated Section 63-605 is amended by adding the following:

Notwithstanding the foregoing provisions, the following persons, subject to the following limitations, shall be exempt from the requirement of a license and a certificate of fitness:

- (a) Medical interns, residents, and clinical fellows while participating in a training program approved by the American Medical Association, performing duties assigned to meet the requirements of such a program, and while under the supervision and control of a physician licensed to practice medicine in the state of Tennessee. No such intern, resident, or clinical fellow shall be permitted to practice medicine outside of his duties and responsibilities in the American Medical Association approved training program without being licensed to practice medicine in Tennessee.

It shall be the responsibility of the program director or the dean responsible for the training program to apply to the Board of Medical Examiners for an exemption for each such medical intern, resident, or clinical fellow. Such application for exemption shall be filed annually. It shall further be the responsibility of the above named program director or dean to notify the Board of the termination of an applicant's participation in the training program, whether by completion of the program or for any other reason.

The Board of Medical Examiners may impose a fee, not to exceed \$10, to accompany each application for exemption.

- (b) Visiting medical faculty licensed in a country other than the United States and employed full time by a college or university operating an accredited medical school in the state of Tennessee, provided that the visiting faculty member is a graduate of a medical school approved by the Board of Medical Examiners of the State of Tennessee, and is a recognized medical authority

approved by the Board of Medical Examiners of the State of Tennessee, and provided further that the practice of the visiting faculty member is limited to and is incidental to the visiting faculty member's employment at an accredited medical school in the state of Tennessee. This shall not be construed as a grant of permission for the visiting faculty member to engage in private practice in any form.

It shall be the responsibility of the program director or the dean of the medical school to apply to the Board of Medical Examiners for an exemption for each such visiting faculty member. Such application for exemption shall be filed annually and an individual applicant may not receive an exemption for a period in excess of two (2) years. It shall further be the responsibility of the above named dean to notify the Board upon termination of a visiting faculty's responsibilities.

The Board of Medical Examiners may impose a fee, not to exceed \$10, to accompany each application for exemption.

Reference Committee A—recommended that Resolution 5-77 be adopted as amended; however, three amendments to the resolution coming from the floor of the House led to the adoption of the resolution as amended by the House.

ACTION: ADOPTED AS AMENDED

SUBSTITUTE RESOLUTION NO. 6-77

"Natural Death Act" Legislation

**By: MEMPHIS AND SHELBY COUNTY
MEDICAL SOCIETY**

WHEREAS, The physicians of Tennessee have historically been noted for their excellence in medical treatment and their respect for life and support the concept of death with dignity. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as being opposed to the natural death act bill before the Tennessee General Assembly (H.B. 132, S.B. 966) because this bill will interfere with the physician exercising his best judgment and treatment of his patients.

Reference Committee A—stated that a substitute resolution had been presented in the Reference Committee hearing and the Reference Committee recommended adoption of Substitute Resolution 6-77.

ACTION: ADOPTED AS SUBSTITUTED

RESOLUTION NO. 7-77

**An Act to Amend TCA Section 23-3415
(Being a Part of the Medical Malpractice Review Board and Claims Act)**

**By: MEMPHIS AND SHELBY COUNTY
MEDICAL SOCIETY**

BE IT ENACTED BY THE GENERAL ASSEM-

BLY OF THE STATE OF TENNESSEE THAT:

SECTION I, Tennessee Code Annotated, Section 23-3415 be amended by adding the following words at the end of Subsection (b):

In any medical malpractice action where the plaintiff does not obtain a judgment against the defendant, and the Board has found in favor of the health care provider, there shall be a rebuttable presumption of malicious prosecution or malicious abuse of process. In any medical malpractice action where the Board has found in favor of the claimant, there shall be a rebuttable presumption that the plaintiff is not guilty of either malicious prosecution or malicious abuse of process in filing such action in court.

SECTION II, This act shall take effect from and after its passage, the public welfare requiring it.

Reference Committee A—recommended withdrawal of Resolution 7-77.

ACTION: WITHDRAWN

RESOLUTION NO. 8-77

**Opposition to National Health Insurance and
National Medicine**

**By: MEMPHIS AND SHELBY COUNTY
MEDICAL SOCIETY**

WHEREAS, It has become increasingly evident that a strong push is being made to achieve some type of national health insurance and national medicine; and

WHEREAS, A number of bills have been introduced into the Congress of the United States to this effect; and

WHEREAS, The private practice of medicine under the free enterprise system has proven beyond doubt to be the best system the world has ever known. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as being opposed to any type of federally-controlled health insurance and strongly in favor of the free enterprise system.

Reference Committee A—recommended that Resolution 8-77 not be adopted; however, action from the floor amended the resolution that was satisfactory to the House and therefore the amended resolution was adopted.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 9-77

**Collection and Confidentiality of
Health Care Data**

**By: J. KELLEY AVERY, M.D., PRESIDENT,
TENNESSEE FOUNDATION FOR MEDICAL
CARE, INC.**

WHEREAS, The State Center for Health Statistics (SCHS), Tennessee Department of Public Health, in accordance with P.L. 93-353, is being supported by the National Center for Health Statistics (NCHS) as part of the Cooperative Health Statistics System (CHSS) activity in Tennessee; and

WHEREAS, P.L. 93-641 and its legislative history relate that a health systems agency (HSA) should not engage in data collection activities, but should, to the maximum extent feasible, obtain information from existing data systems, such as PSROs and CHSSs; and WHEREAS, The American Medical Association policy is:

1. A primary responsibility of the physician-controlled local PSRO is the ownership, maintenance, and the prudent dissemination of data generated by medical providers within the PSRO.
2. The pathway of data flow for PSRO decisions and documentation thereof shall be delineated and controlled by PSRO.
3. Routine reports of data that are required by statute should be furnished in accordance with the law, but these reports shall not identify the specific patient, physician or hospital.
4. It must be the prerogative of the PSRO to choose its data processor.

WHEREAS, All providers and users of data desire to avoid any unnecessary and duplicative efforts devoted by each agency in data collection, processing and dissemination; and

WHEREAS, The Tennessee Foundation for Medical Care, Inc., has been collecting PSRO information for all Title XVIII (Medicaid) and Title XIX (Medicare) patients and provides a data abstracting service to hospitals in Tennessee for all patients. Now, therefore be it

RESOLVED, That the Tennessee Medical Association supports the concept of a "single statewide health statistics system" so long as the Tennessee Foundation for Medical Care, Inc., is responsible for and controls the collection, and performs the processing and provides the statistics on patterns of utilization and quality of care including those required and requested by the Bureau of Health Planning and Resources Development (BHPRD), HEW Recommended Data Sets; and be it further

RESOLVED, That the sharing of data and information such as statistics on patterns of utilization and quality of care will be subject to approval by the board of directors of the Tennessee Foundation for Medical Care, Inc., for PSRO Area II and the board of directors of Shelby County Foundation for Medical Care, Inc., for PSRO Area I.

Reference Committee C—recommended adoption of Resolution 9-77 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 10-77

Principles Dealing With Health Care Legislation

By: BOARD OF TRUSTEES

TENNESSEE MEDICAL ASSOCIATION

WHEREAS, Governmental involvement in health care has been for many years, is now, and probably will continue to be of primary concern to practicing physicians and their patients; and

WHEREAS, The American Medical Association and component societies have studied this problem exhaustively for many years. Now, therefore be it

tively for many years. Now, therefore be it

RESOLVED, That the Tennessee Medical Association endorses the following 17 principles as imperative in any legislation dealing with health care:

1. *Comprehensive Coverage for the Entire Population*
Full hospitalization, both inpatient and outpatient, would be included in this comprehensive coverage, as well as full medical care, both in and out of hospital. All diagnostic, therapeutic and preventive care by or under the direction of a physician would be included. Skilled nursing facility care, home health services, full dental care for children, and emergency dental care would also be covered benefits.

2. *Premium Subsidy and Cost Sharing*

Premiums on insurance of the non-employed, the self-employed and the elderly would be shared between the insured individual or family and the federal government based on income. For the poor, the premium would be paid in full. For others, as income rises, the federal assistance would diminish.

Coinurance would be based on income, but an absolute dollar limit on coinsurance would apply to all. Low income individuals would pay no co-insurance.

3. *Varied Sources of Funding, Private and Public*

Federal government financing would be limited primarily to subsidies on an income-related basis of the premium for the non-employed, the self-employed and the elderly (as a supplement to Medicare benefits) and to tax assistance (for five years) to employers who experience increase in payroll costs as a result of the employment-based insurance requirement.

4. *Minimum Federal Dollars*

Federal participation would be limited essentially to assisting the poor and low-income individuals pay health insurance premiums.

5. *Minimum Federal Administration*

The AMA program would be administered primarily in the private sector through the use of private health insurance. While a health insurance board (composed of a majority of health professionals) would establish minimum standards of qualification of insurers and insurance plans, state insurance departments would (as they do now) regulate private insurers.

6. *Freedom of Choice*

The program preserves freedom of choice by the patient and physician. It would provide for individual choice of coverage through a health insurance policy, Blue Cross/Blue Shield or other plan, or prepayment plan (including HMO), and for individual choice of physician. The physician's freedom is also preserved, including his choice of practice.

7. *Preservation of Physician/Patient Relationship*

The program also preserves the integrity of the physician/patient relationship. It contains a general prohibition against federal interference in the practice of medicine. The individual freedoms of both physician and patient are maintained, as indicated

above, with the individual physician exercising his own best judgment as to medical care and treatment needed for his patient.

8. *Pluralism*

The AMA program builds upon the strengths of our pluralistic health care delivery system. It would utilize various modes of health care delivery, allowing for further development through innovation and experimentation.

9. *Continuity of Benefits*

The AMA program establishes uniform benefit coverage for all persons.

As a further protection, the program would provide for a continuation of the same insurance policy for an individual for 30 days after termination of employment (with 60 additional days if paid for by the individual). Moreover, while a person was covered by unemployment compensation (and to the end of the calendar year if not employed by then) he would be covered at government expense.

10. *No Social Security Financing*

There would be no social security financing. Basic financing would be in the private sector. Federal premium subsidies would be made from general revenues through credits against income tax or redemption of "certificates of entitlement."

11. *No Social Security Administration*

The social security administration would not administer the new program. Overall program administration would be in the private sector and would be the primary responsibility of private insurance carriers, with premium assistance administered through the federal tax laws.

12. *State Licensure and Certification*

The program would continue present state responsibility for licensure and recognition or certification of health manpower.

13. *Quality Controls*

Rather than advocate a single inflexible method which may not be appropriate for many areas or situations, the program would authorize the health insurance board to develop appropriate mechanisms for quality review at time of implementation of the program.

14. *Cost Controls*

The program addresses the complex issue of cost controls in several ways. It would require (in most cases) coinsurance on services. In addition, hospital reimbursement would be subject to acceptable formulae as determined and agreed on by hospitals and insurers thus including a variety of reimbursement methods including prospective reimbursement.

Medical service would be subject to usual, customary and reasonable levels of reimbursement and be subject to present private insurer programs of review.

Also, the health insurance board would have authority to establish appropriate mechanisms for utilization review of services.

15. *Use of Private Insurance*

Coverage under the AMA program would be

furnished by private insurers on a risk and underwriting basis.

16. *Coordination of Benefits*

Benefits payable under any duplicate coverage would be coordinated to avoid duplication of payments.

17. *Separation of Medical and Institutional Components of Expense*

Identification of expenses according to classes of health care providers would be desirable to assess costs of the program.

Reference Committee A—recommended adoption of Resolution 10-77.

ACTION: ADOPTED

**TENNESSEE'S OUTSTANDING
PHYSICIAN OF THE YEAR**

Eugene M. Regen, M.D.

Each year the Tennessee Medical Association has the privilege of honoring one of our own as the Outstanding Physician of the Year. No greater honor can be bestowed upon any individual than being recognized by one's peers for outstanding achievement. This year, the House of Delegates considered three physicians who, each in his own right, are deserving of this special recognition; however, only one could be chosen and we pay tribute to him.

Eugene M. "Pop" Regen, M.D., is one of only a few who can be said to be a "legend in his own time." He has been in the practice of orthopedic surgery in Nashville since 1932. At the tender age of 77, Dr. Regen continues to be one of the most active members of the medical community. He is known nationally for his scientific contributions, having developed several significant techniques and procedures being used today by orthopedic surgeons.

"Pop" Regen, having received his M.D. degree from Vanderbilt University School of Medicine in 1928, began an illustrious career at Vanderbilt and today still holds the position of clinical professor of orthopedic surgery. His most recent accomplishment has been the development of a free ostomy clinic in Nashville, where he has devoted countless hours of volunteered service.

His leadership in his specialty society included being a past-president of the Nashville Orthopedic Society and on three separate occasions, has served as president of the Tennessee Orthopedic Society.

He and his lovely wife, Laverne, have three sons: Eugene Jr., who is practicing orthopedic surgery with his father; David, who is a professor of physiology at Vanderbilt, and Barry, who is a practicing attorney in Dickson.

Because of his outstanding work, the Nashville Academy of Medicine was proud to recommend Dr. Regen for this award.

The Distinguished Service Award is presented annually by the Board of Trustees of the Tennessee Medical Association to physician members who have made eminent contributions to the public welfare or to the advancement of medical science. At the 142nd Annual Meeting of the TMA on April 15, the Chairman of the Board of Trustees announced that there were three recipients of the award in 1977. The following are those who received the award:

B. F. Byrd, Jr., M.D., Nashville—Much has been said and written about the many and varied accomplishments of this physician who will receive the Distinguished Service Award.

Practicing surgery in Nashville since 1948, he has excelled as a medical teacher serving as professor of clinical surgery at both Meharry Medical College and Vanderbilt University School of Medicine. He holds six hospital appointments in the Nashville area, and is currently president of the medical staff at St. Thomas Hospital. He has held a major office in every community and civic activity in which he is a member. He is an active member and leader in some 20 professional societies at the local, state and national levels. He has published at least 65 scientific articles and papers of great import to the practice of medicine, and his military service during World War II was equally distinctive.

These remarkable achievements have already brought honor and esteem to this truly outstanding colleague and to the medical profession as a whole. However, we would be remiss if we did not again pay tribute to him, particularly at this time, for his contributions to the study and treatment of cancer.

This physician is the immediate past-president of the American Cancer Society. He has served on the Board of Directors of that national body for the past 12 years and has chaired the following programs and activities: Medical and Scientific Executive Committee, Committee on Rehabilitation for the Cancer Patient, Committee on Tobacco and Cancer, Legislative Committee, Task Force on Breast Cancer Control, First and Second Conferences on Human Values and Cancer, and the National Conference on Human Values and Cancer, and the National Conference on Recent Advances and the Detection and Diagnosis of Cancer.

He has not only been the leading spokesman for the national association, but has served as president, board member and Executive Committee chairman of

both the Nashville-Davidson County Unit and Tennessee Division of the American Cancer Society.

Numerous other organizations have been blessed with this physician's leadership and keen interest in cancer. He currently serves as chairman of the Cancer Advisory Committee, Joint Commission on Accreditation of Hospitals; chairman of the Commission on Cancer, American College of Surgeons, and is past-chairman of the Committee on Cancer, Tennessee Medical Association.

It has been said with affection by many that this physician is a "giant of a man" in every respect. Certainly the truth of this statement is clearly demonstrated by his vast contribution to the study and treatment of cancer.

The recipient is a native of Nashville. He is married to the former Allison Caldwell also of Nashville. They are the proud parents of six fine children: Benjamin Franklin Byrd, III, age 26, a fourth-year medical student at Vanderbilt; Barney Duncan Byrd, age 24, a first-year law student at Memphis State; Damon Winston Byrd, age 23, who will receive his bachelors degree in business administration at Andrews College in North Carolina this spring; Andrew Wayne Byrd, age 22, a first-year law student at Vanderbilt; Evelyn Hope Byrd, age 21, who will graduate this spring from Mt. Holyoke College in Massachusetts; and John W. Thomas Byrd, age 19, a junior in pre-med at the University of Miami.

The Board of Trustees was pleased to present the Award to Dr. Byrd.

William T. Satterfield, Jr., M.D., Memphis—Perhaps no other physician has overcome obstacles as great as the recipient of this Distinguished Service Award. This physician has exemplified character in the manner in which he has shown patience and determination in the many obstacles he has faced.

This recipient was born in the city of Memphis and was educated in the Memphis public school system. He attended the Virginia Military Institute in Lexington, Virginia from 1950-52, and attended Memphis State University from 1952-54, at which time he graduated with a B.S. degree. In 1955 he entered the University of Tennessee College of Medicine from which he graduated in 1958 with an M.D. degree.

The recipient served his rotating internship at the Baptist Memorial Hospital from 1958-59 and has

REPORTS OF OFFICERS

REPORT OF THE PRESIDENT

C. GORDON PEERMAN, JR., M.D.

Dr. Peerman abstracted his report. He stated that during the past year he was honored to have served as your President:

This has been a busy but rewarding year. It has allowed me to travel throughout the state and meet many physicians and learn their interests and concerns. One message is clear to me—that there is no more intelligent and capable group of men and women in our society today than the physicians of Tennessee. Their contributions to

CE AWARDS

neral surgery residency at the same institution from 1959-63. He then entered private practice with his father who was also a renowned physician.

In 1970 this distinguished physician suffered a myocardial infarction followed by a cardiovascular accident and it was during this time that he became interested in others who have or would in the future sustain this same type of problem.

In January of 1971 he entered into an informal training program at the Stroke Unit of Rancho Los Amigos Hospital in Downey, California. He was named medical director of the Stroke Unit of the Baptist Memorial Hospital in Memphis in April, 1971. He still holds this position. He was also named medical director of the Lamar Unit Rehabilitation Center of the Baptist Memorial Hospital at Memphis in 1975.

His medical society associations in addition to his county, state, and national affiliations are the following: American College of Surgeons, Southeastern Surgical Congress, and Memphis Surgical Society. He holds staff appointments at the Baptist Memorial Hospital, Methodist Hospital, St. Joseph's Hospital, and the City of Memphis Hospital. He is also assistant clinical instructor, Department of Surgery at the University of Tennessee College of Medicine and holds the office of treasurer of his county medical society in 1970-71.

He is married to the former Janet Reid of Memphis. They have five children: Bill III; Stephen; Stephanie; and twin boys, Richard and Clifford. He is a member of the Second Presbyterian Church in Memphis. His hobbies are hunting and fishing with his family. He and his family enjoy weekends on their small farm at Somerville, Tennessee. His chief interest is all forms of rehabilitation.

The Board of Trustees was proud to present this award to Dr. Satterfield.

George Thomas Proctor, M.D., Springfield—This award is made to a distinguished Tennessee physician who has had a very unique and meaningful experience. Dr. George Thomas Proctor graduated from the University of Tennessee Medical School in 1947, and completed a residency in radiology at Vanderbilt in 1953. He was Board certified in 1954 and, after serving as chief of radiology with the Army's 1st field hospital in Germany, he practiced in Maryville, Tennessee for ten years. It was during this time that he visited the Holy Land and was

deeply impressed by the medical and spiritual needs of the people there. As a consequence of his desire to help remedy the situation, Dr. Proctor and his family went to Baraka Hospital near Jerusalem in 1966. Known as "the missionary doctor" in that area which was under the rule of Jordan at that time, Dr. Proctor administered to body and spirit of his patients.

After permission to continue hospital operations was withheld as a result of the war, Dr. Proctor and his family returned to the United States in 1969. During the next three years, while he was also working with a radiological group in South Carolina, he did postgraduate study at Bob Jones University and became an ordained minister in the Bible Presbyterian Church. At the end of this time he returned to Baraka Hospital, sponsored by the Independent Board for Presbyterian Foreign Missions, to set up a radiology center and to continue his medical ministry. During this time, from 1972 to 1975, he labored to obtain and install equipment which would meet a serious need for radiology services for nearly one million people. He also organized and conducted a school for technologists. Then, with his primary mission accomplished in Baraka and with serious family illness in the states, Dr. Proctor returned to Tennessee in 1975.

Now the chief of the Department of Radiology at Jesse Holman Jones Hospital in Springfield, Tennessee, Dr. Proctor continues in his post as medical director of Baraka Hospital. He has been successful in recruiting other radiologists to continue his work in that area. He also serves as medical consultant for the Independent Board for Presbyterian Foreign Missions. Professional associations in which he holds membership include: Robertson County Medical Society, Tennessee Medical Association, American Medical Association, Middle Tennessee Radiology Society, Tennessee Radiological Society, American College of Radiology, and Radiological Society of North America.

Dr. Proctor and his wife, the former Katherine Manning, have five children. They enjoy travel and participation in outdoor activities such as camping, hiking, and tennis.

His years of unselfish and dedicated service to humanity on a worldwide scale have certainly earned for Dr. Tom Proctor the admiration of this Association, as well as the distinguished award.

the state and the profession are limited only by their individual resolve.

My underlying gratitude goes out to the members of the Board of Trustees who have been both advisor and a friend to me. The headquarters staff has been outstanding in its assistance and its ability to meet any challenge. Mr. Jack Bal-

lentine moved from Executive Director to Executive Director Emeritus in September and Mr. Hadley Williams took his place as Executive Director. Mr. Ballentine has served for 23 years in a most unselfish and capable way imaginable. He has given friendship, information, and dedication that I will always cherish to his job. Mr.

COMMUNITY SERVICE AWARDS

Miss Elizabeth Killeffer, R.N., Cookeville, nominated by the Putnam County Medical Society, was honored by the Tennessee Medical Association for her unselfish 55-year career in nursing service in Tennessee. At age 78 she remains one of the most active nursing volunteers in the Upper Cumberland Region of the state. She currently serves as chairman of the nursing volunteers for the Red Cross Blood Mobile having missed work only twice in the past 16 years.

Miss Killeffer is a native of Shamokin, Pennsylvania, but moved to Tennessee with her family in 1900. She attended the University of Tennessee and later entered nursing training at Blackwell's Island College in New York City where she received her Registered Nurse's degree. In 1921 she became the superintendent of nurses at Fort Sanders Hospital and School of Nursing in Knoxville. She held that post for 40 years until her retirement in 1961. During that time she was responsible for the development of many of the nurses training programs throughout the state and served for many years on the governor's advisory staff. She maintains an active role in the district nurses association and is the former president of the Tennessee Nurses Association.

While devoting her entire career in service to others, she assisted in the financing of the medical education of her two brothers who now practice in Tennessee, John L. Killeffer, orthopedic surgeon in Chattanooga, and Louis A. Killeffer, a general practitioner in Harriman. In addition, she has a nephew, Frederick A. Killeffer, who is a practicing neurosurgeon in Knoxville.

It was a great pleasure for the Tennessee Medical Association to present a Community Service Award to one so deserving.

* * *

Olin F. Morris, Memphis, nominated by the Memphis and Shelby County Medical Society, was cited for his community service and public education activities through the use of electronic media. Serving as the director of public affairs for WREG-TV in Memphis, he produced and served as host of a weekly TV series entitled "The World of Medicine." In cooperation with the Memphis and Shelby County Medical Society, this series is seen throughout the Memphis viewing area. This informational and educational program presents to the general public the current topics in every branch of medicine. In addition to this weekly series, Mr. Morris produced a documentary on the training of a doctor at the University of Tennessee Center for the Health Sciences.

A vice-president of the New York Times Broadcasting Service, Inc., Olin Morris is a graduate of the University of Tennessee. While his day-to-day public affairs activities lead him in many directions, he has a personal conviction to the advancement and improvement of community health. This is reflected in his numerous health-related civic activities where he serves as a corporate board member of the Muscular Dystrophy Association, a member of the Public Relations Committee of the United Way and is a member of the Executive Committee of the American Cancer Society, Memphis Chapter.

It is an honor for the medical profession to have such a "friend" who so unselfishly contributes to his community. The physicians in Memphis and throughout the state of Tennessee are privileged to honor Mr. Morris as a recipient of the Community Service Award.

* * *

Teddy Bart, Nashville, a radio and television personality, nominated by the Nashville Academy of Medicine, was honored for his educational programming of medical and health authorities on his various network shows. Through his daily "Noon Show" and afternoon talk show, in addition to a weekly TV program entitled "Teddy Bart's Nashville," he has devoted countless hours of air time to discussion of medical issues and problems. He welcomes the participation of physicians on these programs and encourages their viewpoints for the general public's information. He is a tough, forthright and persistent interviewer; however, he is fair and receptive to hearing all sides of a story or issue.

In addition to his broadcast expertise, he is an accomplished writer having written several books and occasionally has written a weekly commentary for the Nashville Banner.

He is noted throughout Middle Tennessee and has received numerous public service awards. In 1966 he was listed by the Jaycees as one of the outstanding young men in America. In 1969 he was honorary chairman of the Davidson County Association for Retarded Children. His most recent honor was being made a fellow of the Religious Public Relations Council. He is a board member of the Nashville Conference of Christians and Jews, the Metro Human Relations Commission, and is a member of the Community Response Committee of the Nashville Academy of Medicine.

It was most fitting for the Tennessee Medical Association to honor such an outstanding individual with a Community Service Award.

Williams, with 14 years of experience, will carry on this tradition of excellence as he has already demonstrated by his interest and ability.

Besides the duties of President and serving on

the Board of Trustees and the Executive Committee, it has been my pleasure to represent you at many component society meetings throughout the state this year.

COMMENDATION RESOLUTION

Jack E. Ballentine

WHEREAS, Since 1954 Jack E. Ballentine has diligently served the Tennessee Medical Association as Executive Director; and

WHEREAS, He will be retiring at the end of this year; and

WHEREAS, Through his impeccable integrity, his devout loyalty, his unsurpassed ability, seasoned judgment and sound counsel, his contributions to the members, officers, and the House of Delegates of the Tennessee Medical Association have contributed appreciably to the growth and progress of the Association. Now, therefore be it

RESOLVED, That this House of Delegates express its sincere and heart-filled appreciation to Jack for his multiplicity of contributions and extend to him and his lovely and tolerant wife, Louise, its best wishes for a long and happy retirement; and be it further

RESOLVED, That the Board of Trustees of the Tennessee Medical Association be instructed to present to Jack a permanently framed copy of this resolution so that it may be a constant reminder of our appreciation and admiration.

ACTION: ADOPTED

Several areas of activity, which I would like to bring to your attention follow.

Medical Liability Crisis

The legislative tort changes achieved in the Tennessee Legislature in 1975 have now been in effect two years. It is perhaps too early to definitely assess their effect on the liability crisis, but it is hoped that there are improvements in this problem at least in part due to the legislation.

In April 1975, when Shelby Mutual Insurance Company discontinued writing medical liability insurance, the Joint Underwriters Association was activated.

In October 1975, a called meeting of the Tennessee Medical Association's House of Delegates approved the formation of a captive mutual insurance company. On May 15, 1976, State Volunteer Mutual Insurance Company began writing a claims made policy.

State Volunteer Mutual Insurance Company, in cooperation with the Tennessee Medical Association, is sponsoring seven programs throughout the state to educate doctors regarding medical liability.

National Health Insurance

Apparently the only reason that national health

insurance will not be considered in the upcoming Congress is the cost factor. Questions regarding the form of payment, whether it be the government, employers, individuals, or a combination of these is to be decided. There is some pressure for a catastrophic medical insurance bill to pass this year, but it seems the Administration may want to delay and approach the whole problem sometime next year according to the Secretary of Health, Education, and Welfare.

The American Medical Association's House of Delegates accepted 15 guidelines to be a part of any health insurance legislation that the American Medical Association would support, which include:

- ___Minimal federal involvement in administration.
- ___No social security tax for financing.
- ___No social security administration of the insurance program.
- ___The use of private insurance on risks and underwriting basis.
- ___Cost and quality control.
- ___Each state should have jurisdiction in licensure of physicians and regulation of insurance.
- ___Cost sharing by participating individuals and families; subsidy for the indigent scaled according to income.

After careful consideration and debate by the House of Delegates of the American Medical Association last December in Philadelphia, the House voted to introduce a national health bill, which is HR-1818 and Senate bill, S-218, this year. This at least allows the representatives of medicine to be involved in the political arena fighting for those principles in which we believe.

President Jimmy Carter's Administration has shown interest in the passage of a national health insurance act but has stressed fiscal responsibility. This has contributed to the opinion that there will be no health legislation this year except for an effort to curb fraud and abuse in the federally administered programs. The Administration seems particularly interested in cost controls of health care. The first target is hospital costs and once the federal government has this program started, an effort to control physicians' fees may well be next. We should be ready for this onslaught later this year or next year.

The expectations of the citizens of this country for medical care are so high that these efforts at cost controls may be very disappointing to the federal government. The technology of medicine

also continues to increase in sophistication and cost. Considering both expectations and advancing technology, cost controls may be much more difficult to achieve than the bureaucrats have hoped.

Health Planning and Facility Act

The Health Planning and Facility Act continues to be a source of concern. The purpose of this legislation is to significantly regulate the practice of medicine, postgraduate training, and specialization and training of physicians. It is coercive, discriminatory, and unconstitutional.

The American Medical Association has joined the state of North Carolina, however, along with the North Carolina Medical Society and the state of Nebraska in a suit filed against the National Health Planning Law charging that the law interferes with state government by requiring legislatures to enact certificate of need laws. This suit will probably be heard this year and when the decision is final, it may well be a landmark court decision. Members of the Tennessee Medical Association who serve on local health systems agencies are encouraged to keep in touch with the headquarters staff regarding local developments.

Continuing Education and Quality Control

The whole concept of required and regulated continuing education is odious to me and I feel a marked restraint on my individual freedom. As a result, I have been an advocate of offering educational opportunities of high quality to physicians throughout the state.

In the past, our scientific societies have provided an excellent opportunity to present scientific knowledge gained by individuals for the professional good. After World War II, our educational institutions began to receive a large part of their funding through federal grants. As a result, the new era of grantsmanship evolved and a "publish or perish" mania affected our institutions. A professor was many times evaluated by the length of his bibliography and not necessarily by its quality. Our medical schools rely on federal money for financing, and their growth and expansion has become largely dependent on these funds. When these grants are decreased in times of economy or depressed business activity, our medical schools find themselves in financial jeopardy.

This means that the government has significant

financial leverage with our educational institutions and now seeks to control graduate practicing physicians. Besides requiring a certain number of hours in approved postgraduate education courses, which may or may not be meaningful, recertification is beginning to be considered by the specialty boards. Relicensure may also be in the future.

We should continue to oppose governmental control of medical education and scientific investigation, preserving continuing education and recertification for our individual initiative and the activities of our scientific societies. The only area the government has a legitimate interest in is licensure and this requires objective evaluation free from political bias.

Distribution of Physicians

With the recent enlargement in medical school enrollment, the so-called shortage of physicians is felt to be over. This is further effected by the decreasing birth rate and the increasing utilization of physician extenders.

Our main problem may now be the distribution of physicians. The distribution may not be as bad as many of our detractors would like to make it seem. Fifty percent of our population is within 15 minutes of a physician and only 6% is 45 minutes or more away from a physician.

In order to help physician distribution through payment of federally funded programs, the House of Delegates of the Tennessee Medical Association in 1975 passed a resolution that Medicare and Medicaid not divide the state into geographic divisions for payment of services. This resolution was that all physicians throughout the state be paid according to his specialty and ability and not his location in the state. This had been implemented by the Medicare fiscal agent and will be implemented in the Medicaid program this month.

Political Activity

It is increasingly important that the Tennessee Medical Association develop a unity of action in the political arena. The forum for the development of a unified position is the action of the House of Delegates. Every member of the Tennessee Medical Association has an opportunity to express himself in the reference committees, which in turn recommend action to the House. This is an effective democratic system. Once the House has established the position, we must all

support it within the limits of our overriding personal convictions. Only through unified action will we be able to be effective in the important issues that affect our profession and the citizens of this state.

To the same extent, we should support the American Medical Association's positions on a national level. Hasty criticisms of the national American Medical Association's position without having considered all the issues, is not in the profession's or the public's best interest. Any opposition to our national policies need to be carefully documented and studied.

Our local, state, and national political action committees have done much to make our profession active and interested in the political arena. Your consideration of their activities as well as active participation financially and personally is an obligation that should be taken by each of us.

President-Elect of the American Medical Association

One of our esteemed members and my personal friend, Dr. Tom Nesbitt, is unopposed as a candidate for President-Elect of the American Medical Association. He has served the Tennessee Medical Association as President, Speaker of the House of Delegates, and a delegate to the American Medical Association House of Delegates. He has served the American Medical Association as Speaker of the House, as a Board of Trustees member, and as a member on numerous committees. He is truly one of the American Medical Association's national spokesmen and has rendered invaluable service to the entire country.

Dr. Nesbitt is an eminent urologist in Nashville and has served the profession outstandingly as a practicing physician and a leader of organized medicine. We are proud of him as an individual and support his candidacy enthusiastically and without reservation.

Conclusion

The affairs of this Association have proceeded in an orderly fashion this year and our position is optimum at the beginning of a new year. This enviable position is due to the hard work of the Board of Trustees, the Council, the many active committees of the Tennessee Medical Association, and the headquarters staff.

It is possible that the medical liability crisis is beginning to stabilize for the first time in years. This does not mean that we have a solution but

does indicate that some of the changes that we have helped implement may be on the right track. There must be more work to be done and more time for evaluation before optimism is justified.

My message to you today is to press on to advance the science and art of medicine and keep the public trust. Reasonable answers to all of our problems are not evident now. With hard work and perseverance we will in the end achieve our real objectives if we don't look for easy answers.

REFERENCE COMMITTEE C—accepted the report of the President with commendation and expression of gratitude and heartfelt thanks on behalf of the Tennessee Medical Association for the many hours of time and effort on their behalf. The Reference Committee recommended the report be filed.

REPORT OF THE BOARD OF TRUSTEES W. DAVID DUNAVANT, M.D., *Chairman*

The Chairman abstracted his report and gave the following highlights:

It is the duty and responsibility of the Board of Trustees to determine the policy of management for this Association between sessions of the House of Delegates. Your Board of Trustees has worked diligently during the past year carrying out these responsibilities. A total of six meetings of the full Board have taken place as well as four meetings of the Board's Executive Committee. Demands upon the Board have increased to the point that the Executive Committee meets on a regular basis in between the regular quarterly meetings of the full Board.

The Board and the Executive Committee acted upon 127 items of business during the sessions conducted the past 12 months. Many additional items and matters were handled by telephone conferences and by mail when possible.

The Board has followed the activities of state government in implementing Public Law 93-641, the National Health Planning and Resources Development Act. This all-encompassing new law combines previous federal programs such as Regional Medical Programs, Hill Burton, and Comprehensive Health Planning into one centralized program governed by a state coordinating council. Nine health systems agencies have been designated in Tennessee and the importance of physician participation in these local agencies has been constantly emphasized by the Board. We urge the members of this House of Delegates to follow the

activities of these HSAs and make it your responsibility to see that interested, active physicians are participating and involved in the local planning committees in each of the state's nine areas.

Perhaps the most significant achievement by the Board during the past year was that of accomplishing this House's directive that a physician-owned mutual insurance company be formed in order to provide professional liability insurance to all eligible physicians across the state. As you know, this goal was reached on May 15, 1976, when the State Volunteer Mutual Insurance Company was legally authorized by the Department of Insurance of the State of Tennessee to conduct business and issue policies. At this time last year, the Joint Underwriting Association was in existence and uncertainty existed as to when the newly formed company would be operative. I am proud to report that this Association's offspring is well and growing as a result of the Board's efforts. An enormous amount of time and effort has been expended by individual members of the Board and others in making the State Volunteer Mutual Insurance Company a reality.

A special committee of the Board has also studied the pros and cons of establishing an organization that would lend support to physicians who bring countersuits in those cases involving malpractice claims and lawsuits of a frivolous nature or without just cause. Several state associations have such committees, namely California, Michigan, Illinois, and Georgia. Formation of such a medical protective association would be separate and apart from TMA; however, assistance to the degree permitted by law can be given. If such an association were in existence, funds could be used to assist physicians who choose to countersue. Continued study is being made regarding the formation of a medical protective association.

The Board also appointed a special committee to investigate and study the feasibility of separating the Annual Meeting of the House of Delegates and the General Scientific Session. Considerable time was spent looking at the methods used by neighboring state medical associations. Our meeting this year is being conducted in conjunction with 23 separate medical specialty organizations. It is becoming increasingly difficult to secure appropriate meeting facilities to accommodate the TMA Annual Meeting. The Board did approve the elimination of the General Scientific Session

beginning in 1978 when we meet in Knoxville. This should help to alleviate some of the problems by making available time and meeting rooms that are otherwise vacant but not accessible. Additional study on the Annual Meeting format will continue.

The Board's decision to elevate the former Assistant Executive Director, Mr. Hadley Williams, to Executive Director last September has been well accepted, and the transition has taken place without difficulty. Mr. Jack Ballentine will reach retirement age this year and this will be his last Annual Meeting. His 23 years of devoted service to medicine has been outstanding and the Board has assigned him several specific projects to continue working with and to assist Mr. Williams. I know members of the House of Delegates will want to join with the Board of Trustees in wishing Jack the very best on his well-deserved retirement. The Board feels very fortunate to have had a man with the knowledge, experience, and the ability to step in behind Jack and to carry on the daily operation of our headquarters in a manner in which we have been accustomed.

Second Quarter Board Meeting—April 10, 1976

The Board:

- Appointed standing and special committees of TMA.
- Established and appointed a Committee on Long Term Care as directed by Resolution 3-76.
- Directed that a WATS telephone line be installed at TMA headquarters as called for by the House in Resolution 10-76.
- Referred Resolution 12-76 pertaining to plaintiff's responsibilities in malpractice lawsuits to the Committee on Legislation and to the Ad Hoc Committee on Professional Liability for recommendation.
- Considered a request from the TMA Auxiliary for increased assistance, both financial and secretarial, from the headquarters' office.
- Considered and made recommendations for increasing physician support of the Malpractice Review Boards.

Executive Committee Meeting—May 6, 1976

The Committee:

- Approved the Travel Committee's recommendation that TMA sponsor a Trans-Panama Canal Cruise February 10-19, 1977.
- Directed the Executive Director to investigate rates for liability insurance to cover officers, trustees, councilors, and staff.
- Discussed facilities and arrangements for 1978 Annual Meeting in Knoxville.
- Conducted interviews regarding the replacement of the Executive Director upon retirement.

Third Quarter Board Meeting—July 11, 1976

The Board:

- Approved the actions of the Executive Committee.
- Approved TMA cosponsorship of a seminar on medical staff and hospital laws and by-laws.
- Submitted nominations to Governor Blanton for consideration for appointment to the Emergency Medical Advisory Council.
- Approved the purchase of liability insurance for officers, trustees, councilors, and staff.
- Appointed Mr. Hadley Williams as Executive Director of TMA beginning September 1, 1976.
- Reviewed the governor's executive order establishing the state agency to administer the Health Planning Act and directed that the governor be informed of TMA's desire to see a practicing physician represented on the governing body of the agency.
- Directed the Executive Committee to study the format of the Annual Meeting.
- Approved an appropriation of \$1,000 to the Nashville Academy of Medicine towards legal fees for defending physicians in a class action lawsuit.
- Approved an appropriation of \$750 towards legal fees for defending Dr. David Turner who was named in a lawsuit as TMA's Third District Councilor.
- Appointed Lawrence R. Nickell, M.D. as Vice-President of TMA for Middle Tennessee.
- Made appointments to various TMA committees on which vacancies existed.
- Directed TMA staff to investigate the interest of interns and residents regarding the establishment of an intern and resident business section within TMA.
- Approved Memphis for the 1979 Annual Meeting; Nashville for 1980; and Gatlinburg for 1981.
- Received a report regarding the implementation of the Swine Flu Program.
- Approved the third quarter Financial Statement.

Executive Committee Meeting—August 28, 1976

The Committee:

- Received a report on the progress of the Malpractice Insurance Counter-Education Committee.
- Discussed the feasibility of dividing the House of Delegates sessions and General Scientific Meetings.
- Appointed a special committee to study countersuits in malpractice actions.
- Heard a report regarding the possibility of the State naming a new fiscal intermediary for the Medicaid Program and directed the President to write the commissioner of public health to express TMA's concern over possible disruption of the Medicaid program.
- Outlined the responsibilities of Mr. Jack Ballentine as Executive Director Emeritus beginning September 1, 1976.
- Approved a recommendation from the Travel Committee that TMA sponsor a 14-day Black Sea Cruise, October 5, 1977.

Fourth Quarter Board Meeting— October 10, 1976

The Board:

- Received a report from Equitable Life regarding reimbursement of physicians on a statewide basis rather than geographic as directed by the TMA House.
- Approved a plan to implement a malpractice counter-education program to be presented to county societies across the state who request the program.
- Accepted a report from the Constitution and By-Laws Committee regarding a proposed By-Law amendment to permit the separation of the House of Delegates and the General Scientific Meetings.
- Received a report regarding the legal status of establishing a countersuit committee.
- Approved sponsorship of a reception during the AMA convention in June 1977, to assist Dr. Tom E. Nesbitt in his candidacy for President-Elect of AMA.
- Directed delegates to AMA to introduce a resolution calling for the reestablishment of the AMA's Department of Medicine and Religion as recommended by TMA's Committee.
- Accepted the third quarter Financial Statement.
- Accepted the 1977 proposed budget.
- Approved TMA sponsorship of a legislative conference in February 1977.
- Approved an annual appropriation of \$1,000 to the TMA Auxiliary.
- Approved the sponsorship by TMA of an athletic injuries conference in 1977 as recommended by the TMA EMS Committee.

Executive Committee Meeting— November 17, 1976

The Committee:

- Authorized the installation of an additional telephone line into TMA headquarters.
- Referred a request from the State Health Planning Office regarding TMA's opinion on development of the State Health Plan to the TMA Committee on Governmental Medical Services.
- Approved a recommendation from the Finance Committee that the By-Laws be amended to provide for placement of funds in federal savings and loan associations.
- Refused to endorse physician management workshops without an evaluation and recommendation from the TMA Committee on Continuing Education.

First Quarter Board Meeting—January 15, 1977

The Board:

- Accepted a recommendation from the Governmental Medical Services Committee that an ad hoc committee be appointed to develop recommendations for the State Health Plan.
- Confirmed actions of the Executive Committee of November 17, 1976.
- Appointed Board members to the TMA-Student Education Fund board of directors and to the board of the Tennessee Medical Foundation.

First Quarter Board Meeting—January 16, 1977

The Board:

- Reviewed each TMA standing and special committee and appointed physicians to serve on these committees beginning in April, 1977.
- Received a report from the secretary of the Medical Malpractice Review Boards and approved legislative amendments to improve the operation of the Boards.
- Nominated Dr. Morse Kochtitzky, Nashville, for consideration by the AMA to serve on the Council on Legislation.
- Selected physicians to receive the 1977 AMA Distinguished Service Awards.
- Selected recipients of the 1977 TMA Community Service Awards.
- Appointed legal counsel and accountant for 1977.
- Received a report regarding membership and directed that a resolution be introduced at the April meeting regarding a membership category for students.
- Accepted the 1976 Financial Statement and approved the 1977 budget.
- Approved an appropriation of \$500 to the American Association for Medical Society Executives at the recommendation of AMA.
- Directed that a letter be sent to the county medical societies calling attention to the questionnaire being sent with annual license registration forms and the fact that completion was voluntary on the part of the physician.

Executive Committee Meeting—March 2, 1977

The Committee:

- Received a report from the TMA legal counsel regarding inquiries being made by the Federal Trade Commission and Federal Election Commission and granted authority to respond to the requests.
- Approved resolutions to be introduced in the House of Delegates on behalf of the Board of Trustees.
- Discussed and approved policy positions regarding physicians assistant legislation, living will, confidentiality, and limited medical license.
- Accepted a recommendation from the Public Service Committee that the membership be made aware of problems relating to radiation treatment for certain conditions given in 1930, 1940, and 1950.

REFERENCE COMMITTEE C—received the report of the Board of Trustees and recommended that it be filed.

REPORT OF THE SECRETARY-TREASURER JAMES W. HAYS, M.D.

The annual audit for the fiscal and calendar year ending December 31, 1976 has been completed. The customary examination of Association records was made by Mr. Ezra Jones, certi-

fied public accountant, whose report contains a summary of accounting policies and pertinent notes to financial statements as well as the statements themselves. The Association uses the fund accounting method by specific purposes. The net value of property has been reduced by recording depreciation on a straight-line basis and charged as an expenditure. No provision has been made for income tax on unrelated income that might be assessed by the Internal Revenue Service, nor has any provision been made for possible losses on notes receivable.

The Association operated again in 1976 without a deficit by virtue of another increase in membership, an unusually favorable return on investments, and the traditionally conservative fiscal policy. A condensed financial report prepared in a format similar to the annual audit is appended hereto in order to show the assets, liabilities, fund balance, operating revenues, and expenditures of the Association. The complete audit for 1976 is available for examination.

The increase in annual dues commencing in 1977 which was authorized by this House in 1976 came at a most propitious time. It has enabled some needed expansion of staff and services without reducing our accumulated reserves. I assure you that your Association remains financially sound and that its fiscal affairs are being managed responsibly.

TENNESSEE MEDICAL ASSOCIATION FUND BALANCE SHEET OPERATING FUND

	December 31	
	1976	1975
ASSETS		
1. Bank Accounts		
(Checking and		
Savings)	\$140,887.34	\$131,929.64
2. Investments	500,000.00	500,000.00
3. Interfund Notes		
Receivable (Student		
Education Fund)	29,200.00	29,200.00
4. Property Fund—Fixed		
Assets (Land, Build-		
ing Equipment—Less		
Depreciation)	226,934.86	226,359.08
LIABILITIES		
Accounts Payable	\$ 2,536.49	\$ 5,715.14
Accrued Payroll Taxes	105.93	29.22
FUND BALANCES		
O & R	\$667,444.92	\$655,385.28
Property	\$226,934.86	\$226,359.08

**TENNESSEE MEDICAL ASSOCIATION
OPERATING FUND
STATEMENT OF REVENUES,
EXPENDITURES AND FUND BALANCE**

	Year Ended December 31	
	1976	1975
INCOME		
Exhibits and Annual Meeting	\$ 6,574.00	\$ 13,703.00
*TMA Dues	286,915.00	282,220.00
**Journal Advertising (\$23,713.88)		
Investment Income	44,921.37	33,165.06
Building and Miscellaneous Income	8,151.78	5,762.52
TOTAL	<u>\$346,562.15</u>	<u>\$334,850.58</u>
EXPENDITURES		
Administrative	\$198,820.59	\$169,969.07
***AMA Delegates and Hospitality		
Annual Meeting—TMA	20,342.11	17,564.82
Attorney	4,696.25	37,857.50
Board of Trustees—Committees-Council	9,953.27	8,956.96
Continuing Medical Education	25,000.00	25,000.00
Headquarters Building	12,735.58	9,753.96
Health Careers	1,250.00	1,250.00
IMPACT	3,000.00	3,000.00
**Journal-TMA		
Legislative Expense	10,305.39	6,869.49
***Staff Salaries and Employee Insurance		
Taxes	7,555.61	6,506.81
Staff Travel	12,623.32	9,448.34
Other Expenses	4,591.86	12,717.00
TOTAL	<u>\$310,873.98</u>	<u>\$308,893.95</u>
Excess Journal Costs	(\$ 23,628.53)	(\$ 18,359.40)
Excess of Revenue Over Expenditures	<u>12,059.64</u>	<u>7,597.23</u>

*Additional amount of \$19,640.00 of 1976 dues allocated to JOURNAL.

**See JOURNAL Income and Expense Report.

***Included in Administrative Expense.

**TENNESSEE MEDICAL ASSOCIATION
JOURNAL INCOME AND EXPENSE
YEAR ENDED DECEMBER 31, 1976**

	Total	Readership	Advertising
INCOME			
Allocation of Dues	\$19,640.00	\$19,640.00	\$
Advertising	23,713.88		23,713.88
Subscriptions	1,336.00	1,336.00	
	<u>44,689.88</u>	<u>20,976.00</u>	<u>23,713.88</u>

EXPENSES

Printing and Distribution	\$32,402.83	\$22,711.60	\$ 9,691.23
Editor and Board	3,000.00	3,000.00	
Clerical Assistance	600.00	600.00	
Clipping Service	812.05	812.05	
Supplies	98.44	98.44	
Overhead	31,405.09	20,936.73	10,468.36
	<u>68,318.41</u>	<u>48,158.82</u>	<u>20,159.59</u>

**EXCESS
EXPENSES**

(\$23,628.53) (\$27,182.82) \$ 3,554.29

REFERENCE COMMITTEE C—received the report of the Secretary-Treasurer and recommended that it be filed.

REPORT OF THE JUDICIAL COUNCIL

PARKER D. ELROD, M.D., *Chairman*

The Judicial Council met during the annual session of the Tennessee Medical Association in April, 1976 in Memphis, Tennessee. There was a telephone conference call at noon, December 12, 1976.

The Council had been asked to express an opinion concerning a problem which arose at Bradley County Cherokee Park Hospital whereby a notice was sent out concerning a visiting urologist holding a consultation clinic for December 20-31, 1976 on a one-time basis. It was the Council's opinion that as long as such a notice went to the staff of that hospital only that it was not an unethical practice. However, they expressed concern over the appropriateness of such notices if this was not discussed with the medical staff prior to the event. Concern was also expressed relative to the follow-up care of the patients who were seen in the clinic as well as arrangements for payment of this consultation service.

The Council was also asked to review certain problems in telephone listings. It was the Council's opinion that normally Board certification was not necessary to be listed under a doctor's special field of interest. However, if the local medical society required Board certification, it would be necessary on the local medical society level. It was also pointed out that such doctors should list themselves in the yellow pages of the telephone directory only in the communities in which they are maintaining offices.

It is noticed that the local societies are appar-

ently active in handling disciplinary problems. The Council feels that if we can police ourselves this is far better than any governmental or other regulatory agencies doing this for us.

I would like to thank the Council members for the time, energy and wisdom extended by each of them throughout this past year.

REFERENCE COMMITTEE C—received the report of the Judicial Council and recommends it be filed.

REPORT OF THE
EXECUTIVE DIRECTOR
MR. L. HADLEY WILLIAMS

This is a most unique report in that for the first time in 23 years it was not prepared nor presented by Jack Ballentine. I appreciated the confidence expressed by the Board of Trustees in naming me to succeed a man who has seen this Association grow from a one man plus one secretary staff with very limited duties and responsibilities to the present staff of 14 people attempting to cope with the multitude of complex problems facing organized medicine. I assure you I shall do everything I can to justify that confidence.

As health and medical care issues continue to increase in number and complexity, the staff, officers, and Board of Trustees must meet and deal with challenges without decreasing the attention and effort dedicated to continuing problems and programs. Consequently, the amount of time and effort necessary of those who serve continues to increase. Each year new confrontations occur and the Tennessee Medical Association, the one organization representing all practicing physicians, must exert its influence in a fair but forceable manner in order to properly represent its members and their patients.

At the most recent AMA National Leadership Conference held in Chicago last January, Congressman Paul Simon of Illinois outlined four ways to prevent assaults on the medical profession. I believe they are worth repeating. In Congressman Simon's opinion, the public must perceive that you are not abusing the privileges of your profession. The public must perceive that you care about the public, not just your own economic interests. You must strive for a higher ethic than the public imposes upon you. You must look at the long-range picture and become a leader in the progress of your profession. He suggested not living from crisis to crisis, but to think of the long-range goal of improving the society as a

whole. I believe his recommendations warrant attention.

In my opinion, it is the responsibility and obligation of staff to facilitate intelligent decision making and to assist in anticipating the future if at all possible. We must look ahead—as far ahead as possible if medicine is to survive in anything like our present form. A concerted effort on the part of TMA must be initiated towards helping to solve the single most important issue facing organized medicine—rising health care costs. Although increases in the past ten years in the cost of providing care are explainable, the proponents of nationalized health care are using the issue to their advantage in promoting government medicine. The current Administration in Washington has indicated that the rise in health care costs is a major public policy problem. Physicians should become more cost conscious and know the cost of the procedures ordered if at all possible. Less costly decisions are more likely to be made in an atmosphere where the threat of malpractice is better contained. This is another area of great concern to TMA and to the physician-owned professional liability insurance company. Concerted efforts are under way through TMA's direction to create a liability control educational program. Several such programs have been presented to county medical societies and others are planned for the months ahead.

Staff must keep abreast of current issues and frequent changes in such government programs as Medicaid, Medicare, HSAs, HMOs, PSROs, and many others. Staff has taken part in meetings at the local, state, and national levels on all of the above programs. Still, new issues, programs and activities are added annually. As a result, your staff must remain flexible to cope with these many diversified challenges. Although each staff member has routine assignments, newer responsibilities must be shifted as the issues dictate. As new or changing major issues are encountered, this shifting of duties is done to best meet the needs of the moment, as well as the best long-term needs of the Association.

I do not feel it is appropriate to attempt to delineate all of your staff's activities for the past year. The following are some of the areas in which staff represented physicians and conducted the business of TMA:

- Membership administration and recruitment.
- Liaison with county medical societies.
- AMA Delegation staffing at two annual conventions.

- Cooperation with medical specialty societies.
- Public service programs.
- Publication of the JOURNAL, TMA Newsletter, and other publications.
- Liaison with allied professional associations.
- Development of TMA legislative program.
- Liaison with members of the Tennessee General Assembly.
- Dues collection and records maintenance.
- Coordination, planning, staffing of the Annual Meeting, House of Delegates, both regular and called meetings, plus other conferences, seminars, and meetings.
- Liaison with governmental agencies.
- Staffing for the Board of Trustees, officers, and all committees.
- Maintaining headquarters building and property.
- Budget development and investment of funds.

One of the most important goals is to improve and strengthen the channels of communications between TMA and its component county medical societies and with other health related organizations as well. Effective communications with its members is the key to survival for any organization. A new telephone system has been installed at TMA headquarters as a first effort towards improving your staff's ability to communicate. Additional improvements are planned.

Financial management and conservation of funds is a constant consideration by the Executive Director and the receipt and disbursement of all funds is subject to the approval of the Secretary-Treasurer. The annual audit and quarterly financial statements are prepared for the Board of Trustees. Only the safest of investments are made with Association funds.

Because of inflation and the spiral of operating costs, dues were increased by the House of Delegates last year. At the time, TMA dues were the lowest of all state medical associations. This year, Tennessee ranks 38th and TMA dues are well below the average of all state associations. Fourteen state associations have increased dues over last year and 19 others levied special assessments in 1976. The projected TMA budget for 1977 is \$481,583, which represents a 33% increase in the last three years.

TMA Membership Report

All levels of medical organizations need a strong membership now more than ever before. Your support is urgently needed to make non-members aware of the benefits of memberships and the importance of strength in numbers in

order for the Tennessee Medical Association to more adequately represent the medical profession.

As of December 31, 1976

	1976	1975	1974
Active Dues Paying Members	3,891	3,770	3,622
Active Resident-Intern Members	37	38	45
Dues Exempt Members:	306	275	279
Veteran Status	301		
Postgraduate	1		
Military	4		
Total	4,234	4,083	3,946
Deaths	37	45	58

AMA members from Tennessee Medical Association:	
Active Dues Paying	3,185
Dues Exempt	306
TOTAL ACTIVE	3,491

(82% of TMA members are also AMA members.)

REFERENCE COMMITTEE C—received the report of the Executive Director with best wishes to the Executive Director for a long and rewarding tenure in this office and reiteration of the assurance of the support from the membership of TMA and recommended that it be filed.

COMMITTEE REPORTS

The following standing and special committees made annual reports to the House of Delegates:

- Committee on Scientific Affairs
- Committee on Legislation
- Liaison Committee to the Public Health Department
- Committee on Governmental Medical Services
- Committee on Tennessee Medical Association Group Insurance
- Committee on Constitution and By-Laws
- Committee on Hospitals
- Communications and Public Service Committee
- Committee on Continuing Medical Education
- Rural Health Committee
- Committee on Emergency Medical Services
- Advisory Committee to TMA Auxiliary
- Committee on Mental Health
- Committee on Medicine and Religion
- Tennessee Medical Association/Tennessee Nurses Association Joint Practice Committee
- Committee on Maternal and Child Care
- Committee on Long Term Health Care

Committees not reporting were:

- Mediation Committee
- Peer Review Committee
- Interprofessional Liaison Committee
- Committee on Occupational Health



*Abstract of the Minutes of the Meetings of the Board of Trustees
Tennessee Medical Association
Room 4-A, Hyatt Regency—Nashville, Tennessee
April 13 and 16, 1977*

The Board of Trustees of the Tennessee Medical Association conducted two meetings during the Annual Meeting of the Association in Nashville. The meetings were held at the Hyatt Regency on Wednesday, April 13, and Saturday, April 16, 1977.

RESUME OF THE BOARD MEETING
APRIL 13, 1977

Members of the Board present:

W. DAVID DUNAVANT, M.D., Memphis, *Chairman*

ROBERT L. ALLEN, M.D., Cleveland

J. KELLEY AVERY, M.D., Union City

VIRGIL H. CROWDER, JR., M.D., Lawrenceburg

JOHN B. DORIAN, M.D., Memphis

ALLEN S. EDMONSON, M.D., Memphis

WILLIAM H. EDWARDS, M.D., Nashville

MARK P. FECHER, M.D., Knoxville

NAT E. HYDER, JR., M.D., Johnson City

OSCAR M. MCCALLUM, M.D., Henderson

C. GORDON PEERMAN, JR., M.D., Nashville

DAVID H. TURNER, M.D., Chattanooga

JOSEPH L. WILLOUGHBY, M.D., Franklin,

Vice-Chairman

Members of the Board absent:

JAMES W. HAYS, M.D., Nashville, *Secretary-Treasurer*

Also attending were: Mr. Charles L. Cornelius, Jr., Nashville, TMA attorney, and the TMA executive staff.

OLD BUSINESS:

(1) The Board finalized committee appointments previously presented at the January meeting. (A copy of all committees are contained in the files at TMA headquarters.) Committees that

were amended included the Committee on Scientific Affairs, Committee on Legislation, Committee on Continuing Education, Advisory Committee to the TMA Auxiliary, and TMA/TNA Joint Practice Committee.

(2) The Board received a report regarding a grant from State Volunteer Mutual Insurance Company to the Tennessee Medical Foundation for the purpose of conducting liability control programs across the state.

(3) Confirmation was given to Memphis as the site for the 1979 Annual Meeting. The dates of April 4-7 were also confirmed as well as the Airport Hilton Hotel as the headquarters.

(4) The Board received a report regarding suggested amendments to the Medical Malpractice Review Board Act that will be presented during the current session of the 90th Tennessee General Assembly.

NEW BUSINESS:

(1) The Board voted to nominate Dr. Francis Cole, Memphis, to Governor Blanton for reappointment to the Health Facilities Commission. The Board voted to nominate Drs. Tom E. Nesbitt, Nashville, and Robert H. Haralson, Jr., Maryville, to Governor Blanton for reappointment to the Medicaid Medical Advisory Committee and Dr. Hays Mitchell, Cleveland, to replace Dr. M. F. Langston on the same Committee.

(2) The Executive Director presented the annual audit for the Board's information and action was approved to adopt the audit as well as the first quarter Financial Statement.

(3) The Board approved a resolution to be introduced to the House of Delegates supporting the 17 points regarding any state or federal legis-

lation dealing with health care adopted by the AMA House of Delegates.

(4) The Board took the following positions on resolutions to be presented to the House of Delegates:

Resolution 1-77—TMA Medical Student Members—support

Resolution 4-77—Tennessee Medical Association Auxiliary—support

Resolution 6-77—Living Will—no position

Resolution 7-77—An Act to Amend TCA 23-3415—opposed

Resolution 8-77—National Health Insurance—opposed

Resolution 9-77—Collection and Confidentiality of Health Care Data—no official stand

(5) The Board accepted the following statement as developed by the Joint Practice Committee:

The TMA-TNA Joint Practice Committee is of the opinion that dispensing of medications is not within the normal scope of practice of physicians and nurses in a joint practice setting. Any exception to this practice necessitated by locally existing conditions should be reviewed by local professional groups and the Board of Pharmacy.

(6) The Chairman reported receiving a communication from the Tennessee Medical Loan Scholarship Program regarding omission of the Tennessee Medical Association Student Loan Program from a recent officer's report.

(7) The Executive Director reported that a new printing contract for publishing the JOURNAL would go into effect June 1, 1977 along with an overall increase in printing cost of 25%. Mr. Williams recommended that TMA increase its national advertising rates by approximately the same percent to help offset the increase. He also reported that the increase in publishing cost was the first incurred by TMA since 1970.

(8) The Board directed that the Executive Committee be the appropriate TMA body to meet with the Tennessee Association for Primary Health Care to discuss goals pertaining to primary health care.

(9) The Board heard a report regarding the organizational meeting of the State Health Coordinating Council as well as recommendations from the TMA Ad Hoc Committee appointed to formulate policy regarding the State Health Plan. Health education, cost containment, co-

ordination of services, and manpower were recommended by the Committee as the major areas of concern for health planning.

(10) The Board appointed Dr. Robert L. Allen, Cleveland, to be TMA's representative on the board of directors of the Tennessee Foundation for Health Careers.

(11) The Board voted to adopt a position of opposition to legislation regarding confidentiality in human services until further study could be made.

L. HADLEY WILLIAMS, *Executive Director*

RESUME OF THE BOARD MEETING APRIL 16, 1977

The Board of Trustees convened immediately following the second session of the House of Delegates.

Members of the Board present:

W. DAVID DUNAVANT, M.D., Memphis, *Elected Chairman*

JOSEPH L. WILLOUGHBY, M.D., Franklin, *Elected Vice-Chairman*

NAT E. HYDER, JR., M.D., Johnson City

VIRGIL H. CROWDER, JR., M.D., Lawrenceburg, *Elected Secretary-Treasurer*

WILLIAM O. MILLER, M.D., Knoxville

DON J. RUSSELL, M.D., Chattanooga

JAMES H. DONNELL, M.D., Alamo

DAVID H. TURNER, M.D., Chattanooga

JOHN B. DORIAN, M.D., Memphis

C. GORDON PEERMAN, JR., M.D., Nashville

WILLIAM H. EDWARDS, M.D., Nashville

ALLEN S. EDMONSON, M.D., Memphis

Members of the Board Absent:

ROBERT E. CLENDENIN, JR., M.D., Union City

GEORGE W. HOLCOMB, JR., M.D., Nashville

Also attending were: MR. CHARLES L. CORNELIUS, JR., Nashville, TMA attorney, DR. JOHN H. BURKHART, Knoxville, DR. TOM E. NESBITT, Nashville, and the TMA executive staff.

(1) The first item of business was to organize the Board and Dr. David Dunavant, Memphis, was reelected Chairman. Dr. Joseph L. Willoughby, Franklin, was reelected Vice-Chairman. Dr. Virgil H. Crowder, Jr., Lawrenceburg, was elected Secretary-Treasurer and Mr. L. Hadley Williams was elected Assistant Secretary-Treasurer.

(2) As a part of the Board organization, the Trustees named the committees of the Board, which are: *Executive Committee*—Drs. W. David Dunavant, David H. Turner, John B. Dorian, C.

Gordon Peerman, Jr., and Virgil H. Crowder, Jr.; *Finance Committee*—Drs. Virgil H. Crowder, Jr., George W. Holcomb, Jr., and Joseph L. Willoughby; *Publications Committee*—Drs. John B. Thomison, Addison B. Scoville, Jr., and Oscar M. McCallum; *Committee on Medical Licensure*—Drs. Francis H. Cole, J. Kelley Avery, Mark P. Fecher, Howard R. Foreman, Eugene W. Fowinkle, Harold W. Jordan, Tinnin Martin, Jr., and Mr. Charles L. Cornelius, Jr., TMA Legal Counsel, Consultant; *Committee on Exhibits*—Dr. William O. Miller; *Ad Hoc Committee on Confidentiality*—Drs. Charles B. Thorne, Robert L. Allen, and John B. Dorian; *Committee on Long Range Planning*—Drs. C. Gordon Peerman, Jr., John B. Dorian, W. David Dunavant, James H. Donnell, and David H. Turner; *Travel Committee*—Drs. C. Gordon Peerman, Jr., David H. Turner, and John B. Dorian.

(3) Following the organization of the Board, appointments were made for Division Coordinators, and the following were nominated and elected: *Division on Scientific Services*—Dr. Don J. Russell; *Division on Legislation and Governmental Medical Affairs*—Dr. Joseph L. Willoughby; *Division on Communications and Public Service*—Dr. James H. Donnell; *Division on Health Services and Socioeconomics*—Dr. Nat E. Hyder, Jr.; and *Division on Medical Education*—Dr. Robert E. Clendenin, Jr.

(4) Matters referred to the Board from the House of Delegates included Committee Report No. 23 pertaining to the TMA/TNA Joint Practice Committee. It was recommended that the Committee be enlarged, strengthened, and the scope be increased. Previous Board action increased the size of the Committee and it was felt the Committee had matters before it which

would broaden the Committee's scope of activities.

(5) Committee Report No. 25 by the Committee on Long Term Health Care had been referred to the Board due to the number of recommendations contained in the report. The Board requested Dr. William O. Miller to meet with the Chairman of the Committee, Dr. Carl Adams, to discuss the recommendations from the Committee and to report back to the Board at its next meeting.

(6) Dr. James W. Hays, Nashville, was named Chairman of the Legislative Committee.

(7) The Board voted to submit the names of Dr. Joseph L. Willoughby and Dr. David H. Turner to the governor for consideration for a position on the Health Facilities Commission.

(8) The Board considered the question of drug prescribing by nurses and went on record as opposing legislation now pending before the General Assembly to permit nurses to prescribe drugs.

(9) The Board heard a report from Dr. John H. Burkhart, Chairman of the TMA Student Loan Fund. Dr. Burkhart reported that all monies in the fund had been committed to students for loans and that the program desired to obtain from TMA a loan in the amount of \$25,000 on an as needed basis. The Board voted to loan TMA/SEF an amount not to exceed \$25,000 for one year.

(10) The Board set July 9-10 for the third quarter Board meeting and decided to hold the meeting at Fairfield Glade near Crossville.

(11) The date for the next Executive Committee meeting was set for May 26, 1977.

L. HADLEY WILLIAMS, *Executive Director*

Abstract of the Minutes of the Judicial Council Tennessee Medical Association Nashville, Tennessee—April 13 and 16, 1977

The Councilors of the Tennessee Medical Association met at 2:30 p.m. in the Davidson Room of the Hyatt Regency Hotel in Nashville on April 13, 1977. Dr. Parker D. Elrod presided. Mem-

bers of the Council present were: Gilbert Rannick, M.D., Johnson City; Felix G. Line, M.D., Knoxville; James R. Royal, M.D., Chattanooga; Donald H. Bradley, M.D., Sparta; Anne U. Bol-

ner, M.D., Fayetteville; Olin Williams, M.D., Murfreesboro; Parker D. Elrod, M.D., Centerville; Arden J. Butler, M.D., Ripley; James B. Witherington, M.D., Memphis. Councilor James H. Donnell, M.D., Alamo, was absent.

(1) The Council discussed the lack of communication between the Judicial Council of the Tennessee Medical Association and the Board of Medical Examiners for the State of Tennessee. The Council agreed to invite Drs. Tinnin Martin and Eugene Fowinkle to the second meeting to be held April 16, 1977, to discuss the problem.

(2) The lack of staff to investigate charges and complaints made to the Council was discussed at length.

(3) Complaints of Dr. Patrick B. Craven were discussed and referred to the Councilor representing his district.

(4) Discussion concerning physician recruitment methods by hospitals was held. It was the Council's opinion that gratis office space and staff personnel given as inducement was not in itself wrong unless the physician was required to use only that hospital or to hospitalize a certain percentage of his patients. The Council reiterated that a physician should bill for his own services with collections being made in an ethical manner.

The Council adjourned until Saturday, April 16, 1977.

SECOND MEETING OF THE JUDICIAL COUNCIL

The Council held its second session during the Annual Meeting of the Association at the close of the House of Delegates session on April 16, 1977. Councilors absent were: Charles Hamilton, M.D., Nashville (6th District), Charles W. White, M.D., Lexington (8th District), and James B. Witherington, M.D., Memphis (10th District).

(1) The first item of business was the reelection of Dr. Parker D. Elrod as Chairman of the Judicial Council.

(2) Dr. Tinnin Martin, Memphis, a member of the Medical Examiners Board, attended the meeting and discussed communications between his Board and the TMA Judicial Council. Dr. Martin pledged to keep the Council informed of actions taken by the Board of Medical Examiners. He requested the Council to keep the Board

informed by letter to him and to the Board's Secretary, Dr. Howard R. Foreman, regarding complaints or if information is needed by the Council.

(3) The Council discussed the feasibility of TMA staff assisting the Council in investigating complaints. It was decided the Chairman of the Council should appear at the next meeting of the Executive Committee of the TMA Board of Trustees to discuss the matter.

(4) The TMA staff will be requested to supply each Councilor with a copy of the newest "Opinions and Reports of the AMA Judicial Council."

(5) Staff assistance from the TMA headquarters for Council meetings will also be requested by the Chairman when he appears before the Board of Trustees.

There being no further business, the Council adjourned until the next meeting, the date and place to be announced.

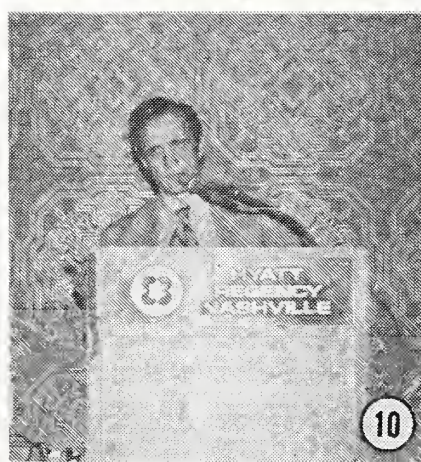
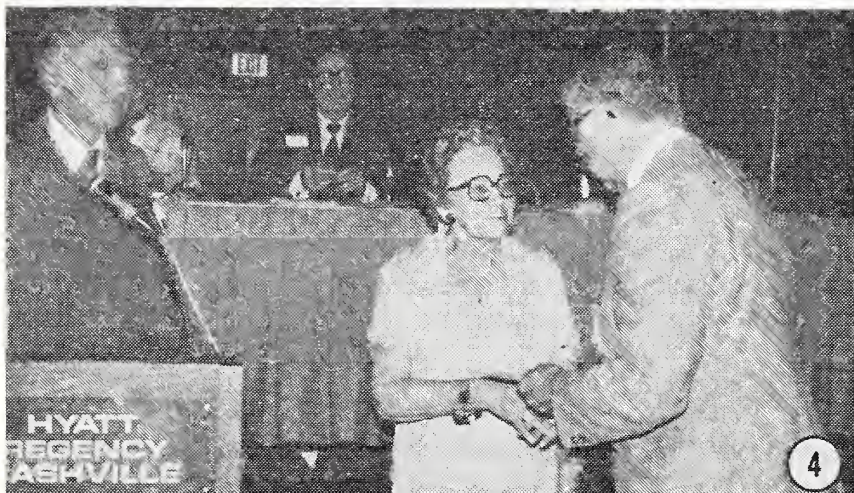
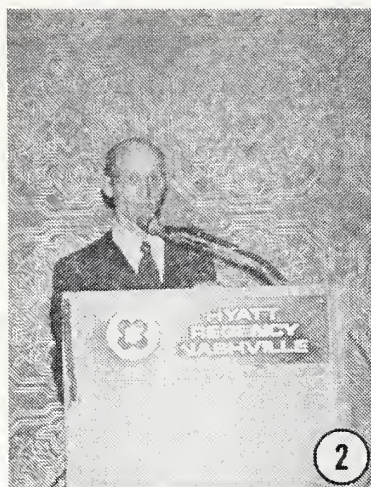
Sojourn in the Ozarks for sports, scenery and CME



AMA's Regional CME Tan-Tar-A Golf and Tennis Resort Osage Beach, Missouri Sept. 16-18, 1977

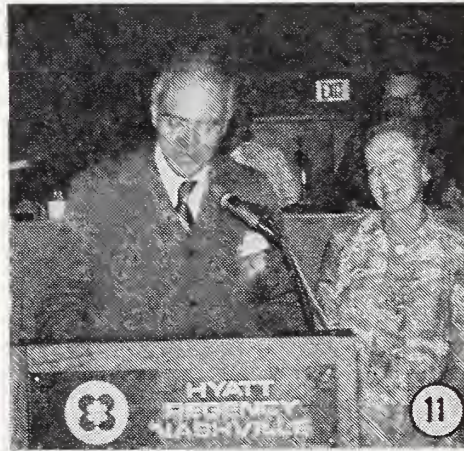
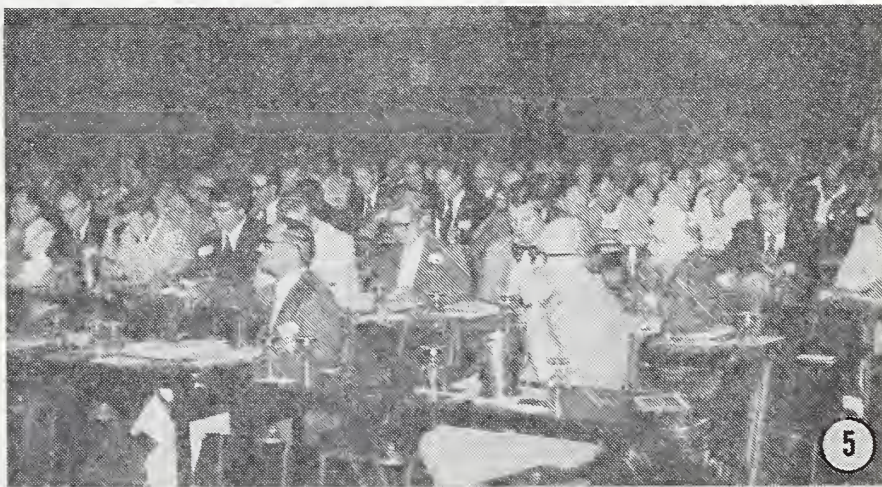
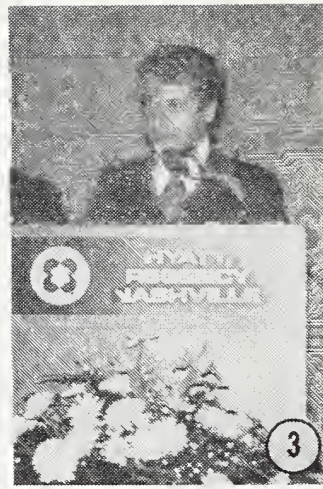
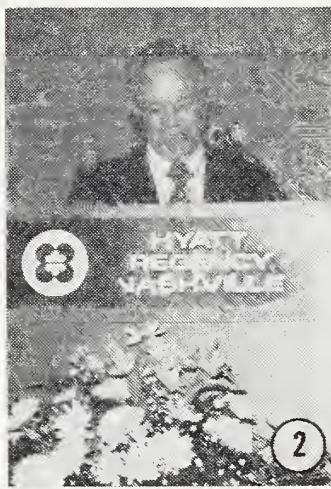
Write:
Dept. of Meeting Services
American Medical Association
535 N. Dearborn St.
Chicago, Ill. 60610

Nashville—1977



1) Outgoing President C. Gordon Peerman, M.D. (left) turning over the gavel to incoming President David H. Turner, M.D.; 2) 3) 6) 10) 11) General Session guest speakers (in order): Robert L. Sanders, M.D.; B. Winfred Ruffner, M.D.; Peter B. Wright, M.D.; Robert L. Bell, M.D.; James W. Pate, M.D.; 4) Mrs. E. A. Garrott, TMAA AMA-ERF Chairman presents an AMA-ERF check to Francis Cole, M.D., for UT-Memphis; 5) Distinguished Service Award presented to George T. Proctor, M.D. (right) by Board Chairman David Dunavant, M.D., (left); 7) Community Service Award recipient Olin Morris of Memphis; 8) John B. Thomison, M.D., Editor, TMA JOURNAL, talks with an exhibitor; 9) IMPACT breakfast speakers Mr. Floyd Kephart (left) and Mr. Lamar Alexander (right).

Annual Meeting Highlights



1) William H. Edwards, M.D., Speaker, presents the Outstanding Physician of the Year Award to Eugene M. Regen, M.D., of Nashville; 2) J. E. (Jack) Ballentine, Executive Director Emeritus of TMA; 3) 9) Community Service Award recipients Mr. Teddy Bart of Nashville and Miss Elizabeth Killeffer of Cookeville; 4) 7) Distinguished Service Award recipients William T. Satterfield, Jr., M.D., of Memphis and Benjamin F. Byrd, Jr., M.D., of Nashville; 5) 6) TMA House of Delegates and TMAA House of Delegates; 8) Incoming President David H. Turner, M.D., of Chattanooga; 10) Health project contest winners receiving \$500 check from Dr. Peerman; 11) Dr. Peerman introduces Mrs. George Zirkle, TMAA President, of Knoxville.

1977 TMA Annual Meeting—House of Delegates Composition

First Session: April 13—Second Session: April 16

EX-OFFICIO MEMBERS

OFFICERS		First Session	Second Session
President	C. Gordon Peerman, Jr.	Present	Present
President-Elect	David H. Turner	Present	Present
Vice-President	John S. Burrell	Present	Present
Vice-President	Lawrence R. Nickell	Present	Present
Vice-President	Robert L. Harrington	Present	Present
Speaker	William H. Edwards	Present	Present
Vice-Speaker	Allen S. Edmonson	Present	Present

BOARD OF TRUSTEES

W. David Dunavant	Present	Present
Robert L. Allen	Present	Present
J. Kelley Avery	Present	Present
Virgil H. Crowder, Jr.	Present	Present
John B. Dorian	Present	Present
Mark P. Fecher	Present	Present
James W. Hays	Present	Present
Nat E. Hyder, Jr.	Present	Present
Oscar M. McCallum	Present	Present
Joseph L. Willoughby	Present	Present

COUNCILORS

First District	Gilbert A. Rannick	Present	Present
Second District	Felix G. Line	Present	Present
Third District	James R. Royal	Present	Present
Fourth District	Donald H. Bradley	Present	Present
Fifth District	Anne U. Bolner	Present	Present
Sixth District	Olin O. Williams	Present	Present
Seventh District	Parker D. Elrod	Present	Present
Eighth District	James H. Donnell	Present	Present
Ninth District	Arden J. Butler, Jr.	Present	Present
Tenth District	James B. Witherington	Present	Present

AMA DELEGATES

John H. Burkhart	Present	Present
Robert H. Haralson, Jr.	Present	Present
Tom E. Nesbitt	Present	Present
A. Roy Tyrer, Jr.	Present	Present

PAST PRESIDENTS

John H. Saffold	Present	Present
Morse Kochtitzky	Present	Present

OTHERS

Eugene W. Fowinkle	Present	Present
John B. Thomison	Present	Present

DELEGATES

EAST TENNESSEE GRAND DIVISION

County Society		First Session	Second Session
BLOUNT	James N. Proffitt	Present	Present
	Marvin D. Peterson	Present	Present
BRADLEY	Hays Mitchell	Present	Present
CAMPBELL	J. L. Walker	Present	Present
CHATTANOOGA-			
HAMILTON	Jesse E. Adams	Present	Present
	C. Robert Clark	Present	Present
	John F. Boxell	Present	Present
	Billy J. Allen	Present	Present
	I. Lee Arnold	Present	Present
	Thomas L. Buttram	Present	Present
	H. Barrett Heywood, III	Present	Present
	David P. McCallie	Present	Present
	Don J. Russell	Present	Present
COCKE	Reece B. DeBerry	Present	Present
CUMBERLAND			
GREENE	John L. Shaw	Present	Present
HAMBLEN	C. C. Blake	Present	Present
HAWKINS			
KNOXVILLE			
ACADEMY	Leon J. Bogartz	Present	Present
	Daniel F. Beals	Present	Present
	John O. Nelson, Jr.	Present	Present
	William O. Miller	Present	Present
	George H. Wood	Present	Present
	George A. Zirkle, Jr.	Present	Present
	Joseph B. Moon	Present	Present
	John T. Purvis	Present	Present
	Charles C. Smeltzer	Present	Present
	Mary B. Duffy	Present	Present
McMINN	Robert G. Hewgley	Present	Present
	W. E. Foree, Jr. (Alt.)	Present	Present
MONROE	James L. Allen	Present	Present
ROANE-ANDERSON	Richard A. Dew	Present	Present
	Harold E. Kerley	Present	Present
SCOTT	H. M. Leeds	Present	Present
SEVIER	Charles L. Roach	Present	Present

County Society

SULLIVAN-JOHNSON	Jack E. Butterworth	Present	Present
	Joseph K. Maloy	Present	Present
	Hugh W. Rule	Present	Present
	Sidney A. Wike	Present	Present
WASHINGTON-			
CARTER-UNICOI	Burgin E. Dossett	Present	Present
	D. M. Sholes	Present	Present
	Charles E. Allen	Present	Present
	Clarence E. Goulding	Present	Present

MIDDLE TENNESSEE GRAND DIVISION

BEDFORD	Carl T. Stubblefield	Present	Present
BENTON-			
HUMPHREYS			
BUFFALO RIVER			
VALLEY	Michael G. Molitor	Present	Present
COFFEE	C. H. Webb	Present	Present
NASHVILLE			
ACADEMY	Edmund W. Benz	Present	Present
	Robert L. Bomar, Jr.	Present	Present
	George K. Carpenter, Jr.	Present	Present
	William B. Crenshaw	Present	Present
	James M. High	Present	Present
	Robert W. Ikard	Present	Present
	Malcolm R. Lewis	Present	Present
	Cullen R. Merritt	Present	Present
	Howard L. Salyer	Present	Present
	John L. Sawyers	Present	Present
	Sarah Sell	Present	Present
	W. O. Tirrill, III	Present	Present
	C. Richard Treadway	Present	Present
	Carter Williams, Jr.	Present	Present
	Clarence C. Woodcock	Present	Present
	John K. Wright	Present	Present
	Carl E. Mitchell	Present	Present
	James A. O'Neil, Jr.	Present	Present
	J. T. Jackson	Present	Present
DICKSON			
FENTRESS			
FRANKLIN	Gerald E. Johnson	Present	Present
GILES	Robert V. Coble	Present	Present
JACKSON	Paul M. Burd	Present	Present
LAWRENCE	C. E. Taylor	Present	Present
LINCOLN	William M. Young	Present	Present
MACON			
MARSHALL	Kenneth J. Phelps	Present	Present
MAURY	Thomas R. Duncan	Present	Present
MONTGOMERY	R. S. Lowe, Jr.	Present	Present
OVERTON	Will G. Quarles	Present	Present
PUTNAM	J. T. DeBerry	Present	Present
	Charles Jordan (Alt.)	Present	Present
ROBERTSON	John B. Turner	Present	Present
RUTHERFORD	Bernard S. Davison	Present	Present
	John T. Cunningham	Present	Present
SMITH	Melvin Blevins	Present	Present
SUMNER	Clarence R. Sanders	Present	Present
	Lloyd T. Brown	Present	Present
WARREN	Hoyt C. Harris	Present	Present
WHITE	Donald H. Bradley	Present	Present
WILLIAMSON	John B. Youmans	Present	Present
WILSON	J. C. Bradshaw, Jr.	Present	Present

WEST TENNESSEE GRAND DIVISION

CONSOLIDATED	Oscar M. McCallum	Present	Present
	Lee Rush, Jr.	Present	Present
	Thomas K. Ballard	Present	Present
	James T. Craig, Jr.	Present	Present
HENRY	Thomas M. Minor	Present	Present
MEMPHIS-			
SHELBY	Thomas G. Dorrity	Present	Present
	John D. Pigott	Present	Present
	Thomas A. Currey	Present	Present
	Hollis H. Halford	Present	Present
	John S. Buchignani, Jr.	Present	Present
	Phillip A. Pedigo	Present	Present
	Rufus E. Craven	Present	Present
	James T. Galyon	Present	Present
	McCarthy DeMere	Present	Present
	Daniel J. Scott, Jr.	Present	Present
	Hugh Francis, Jr.	Present	Present
	Eugene W. Gadberry	Present	Present
	Paul H. Williams	Present	Present
	Francis H. Cole	Present	Present
	Phillip H. Dirmeyer	Present	Present
	Hamel B. Eason	Present	Present
	Tinnin Martin, Jr.	Present	Present
	Dee J. Canale	Present	Present
	Allen S. Boyd (Alt.)	Present	Present
	Evelyn B. Ogle (Alt.)	Present	Present
NORTHWEST	J. Howard Ragsdale	Present	Present
	Hobart H. Beale	Present	Present
TIPTON	Warren A. Alexander	Present	Present

The above information taken from attendance record cards signed by the Delegates.

Leadership That Heals

JAMES D. MALLORY, JR., M.D., ATLANTA, GA.

I want to tell you, after listening to the music last night and this morning, if you like the kind of music I do, I believe if you are good little boys and girls and say your prayers every night, when you die you will go to Nashville.

I have taken a prerogative that I guess speakers often do, and that is to speak on something I feel is of extraordinary importance, something I have been concerned about; it is somewhat different from the announced topic. I am going to talk on something that I guess I might call for lack of a better term, bargain basement living, and I will tell you in a minute what I mean by that.

Let me say, before I go further, though, that it really is an honor for me to be asked to speak to this group. I went to high school in Chattanooga. There are three things that have just been of tremendous importance to my life that I learned there as I came as a rather cavalier, not too caring about anything, 11th-grade student. They are that spiritual value is crucial for growth, development, and fulfillment; that learning might be important and even possibly fun; and that I can play the banjo and guitar. And those three things have meant a lot to me through the years.

I read a rather remarkable book that some of you may know called *The Singer*, by Calvin Miller, who is the only American author I have ever read who is in the same ballpark as Tolkien, C. S. Lewis, and George MacDonald. In this book there is such a poignant conversation between the World Hater, who is the devil, and the Singer, who is Jesus Christ, that it started a whole chain of reaction in my mind, and I immediately had to get out pencil and paper and jot down some thoughts. I want to share them with you today

and introduce "bargain basement living" by reading to you this conversation.

Jesus is outside the walls of Jerusalem. He is going there ultimately to be crucified, and he is standing outside watching people as they come and go.

He watched the human commerce flowing through the rough-hewn gates. Never had he seen so many people hungry for a living song. They jostled shapelessly, a mass of urban sameness. Each hurried after urgent, unattended business, yet none had any reason for the press.

The Singer sighed. Sometimes a child would follow in the madding throng. Already it appeared the youngster tried to learn the routine, manufactured steps of older men he mimicked in the way. Reluctant to adopt the business cadence of the empty throng, the Singer turned and sought a quiet place beneath the wall. He walked into the trees.

"Hello Singer," said the voice he knew too well.

"Welcome to the quiet of the grove. Does the senseless, empty crowd offend you?"

The Singer's only offense came in knowing that the World Hater always seemed to know what he was thinking.

The Singer said, "How did you manage to make them cherish all this nothingness?"

The World Hater answered, "I simply make them feel embarrassed to admit they are incomplete. A man would rather close his eyes than to see himself as your Father's Spirit does. I teach them to exalt their emptiness and thus preserve the dignity of man."

"They need the dignity of God."

"You tell them that. I sell a cheaper product."

I want to discuss with you the cheaper products that we are buying, buying—buying daily as the warp and woof of the air we breathe, of the mass media. We are absolutely inundated with the cheaper products, and we live at a level far below where we were designed to live. I see this centering primarily around the basic needs that all human beings have. If I had to define the ingredients that most likely will make up good mental health, I would say if a person's life-style, relationships with God, and with his fellow man are such that his three basic emotional needs are reasonably being met, the odds are rather high that he will have good mental health. The most basic needs a person has are to be able to give and receive love, to feel he is a valuable worthwhile person, and that there is some transcenden-

Presented at the Annual Meeting of the Tennessee Medical Association, Medicine & Religion Breakfast, Nashville, April 16, 1977. Sponsored by the Committee on Medicine & Religion of the Tennessee Medical Association.

James D. Mallory, Jr., M.D., received the M.D. degree from Duke University School of Medicine where he also completed an internship in internal medicine and a residency in psychiatry. He is certified in psychiatry by the American Board of Psychiatry and Neurology and holds membership in many professional organizations including the American Psychiatric Association, Christian Medical Society, and the American Medical Association. He is currently medical director of the Atlanta Counseling Center and has recently published the book, *The Kink and I*.

tal meaning to his life, that is that there is some overriding meaning other than just the routine of daily life, that it fits into a whole, that it's going somewhere. These are the most basic needs we have.

If the needs are not met at their full potential, we are left with a vacuum. That vacuum is filled with goodies from the World Hater's bargain basement.

Now in regards to the need to give and receive love, the radical claim of Christianity is that where we are in our natural capacities to give and receive love, which vary a great deal, has nothing necessarily to do with our spiritual status. Some of us have a happier arrangement of genes and chromosomes than others. Some have had loving, relaxed relationships from an early age and just find it rather easy to give and receive love. Others find it rather difficult. But regardless of where you are with natural "givens," the radical claim of Christianity is that the person who has committed himself to Jesus Christ will have a supernatural transaction take place. His being is invaded by the Holy Spirit, and he finds a new motivation and a new capacity to give and receive love. And beside that, as he recognizes the authority of Scripture, he has unchanging guidelines which are desperately needed today, when we are being told repeatedly there are no absolutes, there are no absolute truths, and what is true today will not be true tomorrow.

In this kind of "99 shades of gray" philosophy, it is impossible to establish any meaningful ethics or anything else that would guide us in the ability to give and receive love, and as man has not filled this vacuum with God, he seeks the bargain basement living. We see a transition from being able to give and receive love as we were intended to do it by God, to what I would call a carefree casualness unhampered by commitment and responsibility. Three best sellers in the last four to five years have espoused this: the Yale lawyer, Charles Reich in *The Greening of America*, Alvin Toffler in *Future Shock*, the O'Neils in *Open Marriage* all are describing and espousing casual, relatively loosely committed and not lasting relationships.

I was on a TV talk show describing this as a problem, and a psychologist's wife said to me, superciliously, that she used to think as I did, but now she has been liberated and is free. One of the great paradoxes that I see in my office as a psychiatrist is that the people who are shouting

the loudest about being free are the most trapped, enslaved, empty people I ever run across, because they have reduced themselves to being little more than persons driven by stimulus response, because there is no larger significance and meaning to their life than just a drive to "do their thing."

We see the vacuum to give and receive love filled increasingly with pornography and perversion. There are many people who are led to the conclusion from all the books they read—and they are absolutely flooded with them—that one of their inalienable rights is always to be existing in a kind of scintillating ecstasy, unhampered by gutsy commitment or responsibility. And if this is lacking, then something is wrong with them. We see a transition of love to lust, and I don't just mean sexual, but a lustful self-seeking of "my will, my rights, my desires," having the mind set that the object of my love must earn it, must be loving, must be lovable. "I keep score. If you happen to come out on the assets side, I'll invest a little more in you."

Now this is hell's economy, and this is the mind set that many are living under. This is why, for example, the divorce rate has gone from one in four when I was in medical school to one in three as I entered my psychiatric residency, to two in five as I finished it, and to one out of every two now. We have a tremendous need to discover and to feel that we are valuable, that we are worthwhile persons, fulfilling a basic emotional need. The radical claim of Christianity is that we are created in the image of God, lovingly, purposefully created; that we are the crown of His creation, designed to have dominion over this earth; that we are given unchanging guidelines that lead us into being more worthwhile persons. We get the message from Scripture that our lives fit into a meaningful whole under the lordship of Jesus Christ. We are worthwhile, not just by creation, and those who have met God through Christ know that they are worthwhile by their position in Him, and are arranging and ordering their lives in such a way that they are obedient to the Lord. They discover they are worthwhile by function, and this is very, very powerful. There is a profound need to feel that we are worthwhile, that we are valuable persons.

Basically what we are taught, whether it is the Time-Life mentality of many books that come out popularly or over the media or in the universities, is that our presence on this planet represents the workings of a mindless mechanism

through meaningless time and some swampy area probably rich in methane, zapped by lightning of unknown etiology, from which some proteinaceous substance, some amino acids, more complex proteins, and ultimately life are produced. And this tells you who you are. You are part of the carbon cycle, that's who you are.

Now I want to submit to you that just won't quite hack it in terms of the desire to feel one is meaningful and worthwhile. So we have developed a humanist philosophy to try to attenuate the pain that the ultimate truth of what the humanists themselves teach brings, and that is to exalt man as he is, not as what he can become under God, and to remove the sin concept. One of the great, great ironies of today, in the universities and other areas, is that Christianity often is accused of belittling man. Some worn old hymn is trotted out that has a phrase like "such a worm as I" in it, and this is used as Exhibit A that Christianity belittles man. The irony is that if the humanistic philosophy is understood and carried to its logical conclusion, it leads you into an absolute wasteland. Man is a meaningless mechanism who is going nowhere except back to some carbon particles. He is virtually a machine that is impinged upon by external exigencies from without and conflicts from within that totally determine what he does, and that's it.

I submit to you there is no philosophy, there is no religious system on the face of this earth that elevates man to the heights Christianity does. There is nothing that reveals him as high and as loved as Christianity does. It's just simply honest, and it also points out that we all have a destructive flaw within us which centers around a kind of self-centered, self-seeking, grasping fear as our needs are not met. We want to call the shots ourselves, run the show ourselves, for fear that we will lose out; and this separates us from God, it separates us from ourselves, it separates us from our fellow man. The radical claim of Christianity is that this is correctable and one doesn't have to do as the humanist might have us do, which is to look into a mirror each day and say, "Every day in every way we're getting better and better." I'll tell you the truth, when I got up at a quarter of six this morning and looked into the mirror after staying up rather late and listening to the Blue Grass folk music last night, the apparition I saw in the mirror really couldn't make me come up with any notion that every day in every way that I am getting better and better.

About the only thing I could think of was, "Let us pray."

Now what all this kind of "man as a determined machine-like creature" does is produce what I call a Gross National Product Mentality. Your value and your worth are strictly related to your function, to your production. So man becomes someone to manipulate and to be manipulated. Our needs are not being met. We are living in the bargain basement.

Finally, we have a powerful, powerful drive. We're made this way—to find meaning and purpose to our lives, an extra dimension, transcendental if you will. Increasing hoards of people do not have a sense of meaning and purpose. If there might be such a thing as a national neurosis, I would say it may center mostly in this area, of a kind of cynicism about all phases of government and business, and increasingly directed at the medical profession, which traditionally has enjoyed the greatest respect of any institution in this nation. It has led a prominent sociologist to call this the Anomic Society from the Greek "without law," not referring to lawlessness, but referring to an increasing number of people in society who have no basic absolute laws or principles to build their lives upon. It is the kind of lawlessness which precludes the possibility of ultimate meaning and purpose, and yet this is what we are taught: that there are no absolutes; everything is relative.

But again, the radical claim of Christianity is that we are created in God's image. We are given a unique personality, unique sphere of influence, and unique gifts as we are led by the Holy Spirit, as we have a sense of stewardship of our sphere of influence. There are people who come into my sphere of influence who will not come into yours. There are people who come into your sphere of influence who will not come into mine. There is a lot of overlap, but the person who begins to realize that within the framework of his sphere of influence, he has the capacity to have these emotional needs met, to help others have these needs met, becomes, if you will, an agent of healing; and the person who has this sense of destiny, of meaning, of purpose, has the absolute confidence under the lordship of Jesus Christ that "all things work together for good for those who love God, who are the called according to his purpose." This doesn't mean that God in some direct way causes everything that happens to you, but that even if something bad happens to you, because you have

done something stupid or somebody else has, or for some unknown reason, that nevertheless, under his lordship there is an ultimate way in which to build a sense of meaning and purpose. But if this need is not met, again we go into the bargain basement and come up with all kinds of fads, all kinds of substitutes to fill the vacuum of meaninglessness, and all sorts of false messiahs (and I must say that the mental health profession has produced many).

Maybe we can fill the vacuum by letting out a few primal screams. Possibly we can have neuter group therapy and water heated to body temperature, or maybe a little karate therapy would do it. Maybe some transcendental meditation with its mindless pagan mantra, or maybe if we can get hooked up to biofeedback and have some alpha-wave training, that might bring peace.

Let me give you a picture of modern man trying to fill the vacuum of emptiness. He is on a skateboard, going down hill, nude, wiggling a hula hoop, yelling primal obscenities in between closing his eyes and religiously repeating his mantra while hooked up to biofeedback, desperately hoping it's all going somewhere. Other substitutes for our lack of meaning and purpose either blot out the fact that there is no meaning, or they give some temporary strong feeling that feels good. Maybe at least you're alive. The abuse of alcohol, the abuse of drugs, the abuse of sex, the involvement in the occult, involvement in violence, or just plain old busyness are all ways to fill this vacuum. Many people are busily doing really very good things, and are one step away from the hound of heaven who would call them to a higher living on a higher plain, but are afraid if they submit to the Lord they'll lose something, and they just run by being busy with always the specter behind that there might be more.

Let me give you the testimony of three Jews that says there is more for us. First Jesus of Nazareth: "The thief comes only to steal and kill and destroy. I have come that you might have life and have it to the full."

The witness of a brilliant lawyer, Paul: "No eye has seen, no ear has heard, no mind has conceived what God has prepared for those who love Him. There is nothing in all creation that will ever be able to separate us from the love of God which is demonstrated to us through Jesus Christ, our Lord."

The testimony of the Jewish fisherman, rather

raucous, burly Peter: "God's divine power has given us everything we need for life and godliness through our knowledge of Him who called us by His own glory and goodness. Through these He has given us His very great and precious promises, so that through them you may participate in the divine Nature and escape the corruption in the world caused by evil desires. For you know what was paid to set you free from the worthless manner of life handed down by your ancestors. It was not something that can be destroyed, such as silver or gold. It was the costly sacrifice of Christ who was like a lamb without defect or flaw. He had been chosen by God before the creation of the world and was revealed in these last days for your sake. Through Him, you believe in God who raised Him from death and gave Him glory, and so you have faith and hope and are fixed on God."

This is God's challenge: to discover real life. Christianity is not some asceticism or groveling loss of selfhood as depicted by many people in the mental health field and in many other fields. Christianity uniquely offers life, real life, new life, abundant life; not a life that is devoid of sorrow, pain, or conflict, but a new perspective, new capacities, new motivations, new hopes, and new relationships that transcend the problems. As Jesus said, "In this world you *will* have tribulations, but be of good cheer; I have overcome the world."

C. S. Lewis says it is rather remarkable to him that people settle for so much less than what God wants to give. Now here is the great paradox of the Universe, if you will, at least of this planet. Surrender your life to Christ, and become a victorious child of the King. Seek His will for every aspect of your life and you will discover a new freedom that gives you an increased ability to give and receive love, to feel worthwhile, to be worthwhile, and to find meaning and purpose in your life. Now why don't more of us realize this? It's fear, fear from the World Hater. The initial lie of Satan was that God is in fact holding out on you. He doesn't want you to eat that fruit because you'll have something He doesn't want you to have. He is a pleasure robber. We're afraid to cut loose and turn ourselves over to God. We might lose out. And yet I submit to you this is the only way to be a winner.

Come out of the bargain basement and enter the Palace. Smile. The King loves you. He wants you in His family.

AABB Proposes Blood Labeling Alternative to FDA

The American Association of Blood Banks (AABB) has informed the Food and Drug Administration (FDA) that it opposes proposed FDA regulations that would require all blood and blood components intended for transfusion in the United States be labeled as to whether procured from "paid" or from "volunteer" donors. At the same time, the AABB announced a comprehensive Safe Blood Program which will be binding upon the more than 2,000 blood banks and transfusion services which it inspects and accredits.

In a letter sent to the FDA April 18, Dr. Richard Walker, AABB president, indicated that the AABB shares FDA's concern that the American public be furnished the safest possible blood whenever and wherever needed. But he disagreed that the FDA labeling proposal would achieve that objective, urged further consideration of the proposal, and offered an alternative which would address the problems outlined by the FDA commissioner.

The FDA labeling requirements are intended to reduce the use of blood from paid donors, some of which carries a greater risk of transfusion-associated hepatitis than blood from voluntary donors. However, the AABB pointed out to the commissioner that, while the regulations would discourage the use of blood purchased from undesirable high risk sources, they would also discourage the use of blood from very high quality paid donor sources presently providing the safest blood available to some of the most prestigious medical institutions in the United States. The commissioner has previously stated that ". . . it is not the presentation of money to the donor that affects the quality of the blood, but rather the segment of the population from which paid donors usually come."

The AABB also expressed concern that medical institutions in certain areas of the country, particularly in urban areas with many poor and disadvantaged citizens, would experience a critical shortage of blood if the labeling requirements go into effect. Such institutions traditionally have

had to rely heavily upon blood from paid donors. It is expected that after the regulations go into effect, physicians will be reluctant to use such blood for fear of liability in the event that hepatitis occurs from its use.

Dr. Walker's letter noted that approximately 95% of the blood now used in this country comes from volunteer donors, and suggested that if FDA proceeds with the labeling requirements, only blood from paid donors should be labeled. He suggested, also, that blood imported into the United States should be labeled as to country of origin to assure that blood obtained from foreign sources is as safe as that from the United States.

The AABB set forth its alternative proposal through a Safe Blood Resolution adopted unanimously by its board of directors. In the introduction to the Resolution, the board reaffirmed its belief—first expressed in 1972—that Association members should work toward the use of 100% voluntarily donated blood; however, it also recognized that under certain circumstances, blood from compensated donors would be as safe as that from volunteer sources.

The Resolution sets forth a system of reporting and analysis of all blood usage by AABB members, but would leave individual members some flexibility in achieving the goals of the Association and those expressed in the National Blood Policy of quality, efficiency, availability, and accessibility.

In his comments to the FDA, Dr. Walker expressed the view that the AABB program is a "positive step in further reducing transfusion-associated hepatitis" because it will "identify undesirable individuals in both paid and voluntary donor populations." The FDA proposal will not increase the safety of voluntary blood.

The AABB represents nearly 7,000 individual and institutional members and has provided leadership in the blood banking field for 30 years. It has been in the forefront of dissemination and application of scientific knowledge and of technologic advances to improve and make safe all

aspects of blood transfusion service. Its technical manual and its standards are widely recognized and have been adopted by the DOD and others. It is a member of the American Blood Commission and strongly supports the National Blood Policy, which calls for the 100% use of voluntarily donated blood.

AABB Safe Blood Resolution

Whereas the availability of a practical means to test donor blood for products of the hepatitis B virus (HBV) has confirmed epidemiologic observations that blood from certain types of paid donors has a significantly higher risk of transmitting hepatitis and

Whereas the AABB in its 25 years as the only organization representing all aspects of blood banking services has supported the principle that voluntary donors (as defined by the AABB) provide the safest blood and components for patients, the AABB board, on February 8, 1972, recommended to those institutions which were not using 100% voluntary donors, a set of goals calling for using 100% voluntarily donated blood by December 31, 1975, and

Whereas the AABB firmly believes a pluralistic approach will provide the flexibility needed to achieve optimal blood banking services in all areas of the USA and

Whereas the AABB recognizes that a variety of recruitment policies which provide for accountability to the donor are necessary to assure an uninterrupted supply of safe blood to meet patients' needs and

Whereas scientific evidence has shown that carefully selected voluntary donors provide a safe source for blood, other studies from prestigious institutions have documented the safety of blood from an equally carefully selected paid donor population and

Whereas only fragmentary information is available on the safety of blood and blood components routinely used and

Whereas reporting of an analysis of the safety of blood from various donor sources is limited to a few selected areas and

Whereas social policies, economic considerations and moral issues have been confused with questions of safety

The AABB board of directors unanimously adopts the following resolution:

To be eligible for new and/or continuing AABB membership and/or participation in the AABB Clearinghouse an institution shall annually document to the satisfaction of the Association that it:

- A. collects and/or uses blood and components obtained from 100% voluntary donors as defined by AABB and maintains a system for identifying, reporting and recording all cases of suspected transfusion-associated hepatitis;

- B. or if said institution continues to collect or use blood and components for transfusion purposes from donors compensated monetarily, it must establish the safety of the paid donors. Therefore, it shall document annually that:

1. its compensated donors are as safe as voluntary donors in their own program and other programs in the same area by providing data on rates of donor rejection and results of HB_sAg testing,
2. active continuing efforts are made to identify cases of transfusion-associated hepatitis (TAH) in hospitals using its blood and components,
3. it maintains and uses a registry of unacceptable donors;

- C. or if said institution obtains all its blood from one or more outside sources, it shall document annually that it maintains a surveillance program to identify cases of TAH, reports such cases to the collection facility and appropriate public health officials, and documents that blood it obtains from collection facilities using compensated donors is as safe as voluntarily collected blood.

In adopting the above resolution, the AABB board reaffirms the principle that it is desirable that all blood and components be obtained from voluntary donors. We recognize that the majority of the membership has attained the goals set in 1972 but that totally to abandon payment as a recruitment method will produce an interruption in the availability of safe blood in some areas.

All members are encouraged to work towards reaching the goal of using 100% voluntarily donated blood as soon as possible. The Association will continue to monitor the progress of the membership in reaching this goal and will provide assistance and programs to foster meeting the goal. Annually those members not collecting or transfusing 100% voluntary blood will be asked to report why they haven't reached the goal and how they are implementing plans to reach the goal.

It is our opinion that the recommendations we have made will be a positive step in further reducing transfusion-associated hepatitis by identifying undesirable individuals in both paid and voluntary donor populations. We would urge that the federal government, the American Blood Commission, and others join us in intensifying efforts to develop recruitment strategies that will insure an adequate supply of voluntary donors to meet the 24 hour a day, seven day a week needs of patients. Studies on donor motivation, better utilization of blood and its components, and the management of the blood resource are necessary to evaluate the effect of various proposals that purport to achieve the goals of the National Blood Policy, which we wholeheartedly support.



DAVID H. TURNER

President's page

COST

We are now seeing headlines and frequent references in the lay press having to do with "the rising cost of health care." It may be that this subject will replace "medical liability insurance" as the major topic of discussion in the hospital doctors' lounge, surgical dressing room, medical society meeting or wherever two or more practitioners of medicine are gathered together for discussion.

According to recent estimates from HEW, the nation's total health spending has increased 31% over the last two years to \$139.3 billion in fiscal 1976. This increased spending reflects higher prices and greater utilization of services. Total spending on hospitals—which consumed 40% of the \$139.3 billion (\$55.72 billion)—went up by about 15%.

President Carter has presented to Congress a "Hospital Cost Containment Act" designed to "limit the growth of the major component of health cost increases—rising hospital expenditures." This bill through a complicated formula is designed to limit hospital increases to 9% and to discourage unnecessary hospitalization. It is interesting that federal hospitals and hospitals run by HMOs are exempted.

The HEW estimates also state that total spending for physician services was up 15% in 1976 to about \$26.3 billion. May we in the near future expect such legislation as the "Doctor Cost Containment Act" with a complicated formula to limit cost increases to 9%? Secretary of HEW Joseph Califano says no, but he admits it has been considered by the Administration.

What can we as practicing physicians do about the "rising cost of health care?" I personally feel that we can do very little to prevent it. We can try to reduce hospital utilization by our patients and minimize necessary increases in our fees for service, but this will be but a "drop in the bucket."

The AMA has a Commission on the Cost of Medical Care which has been actively functioning for one year. This Commission, composed of experts in many fields, is studying this complex problem from four vantages: Supply, Demand, Technology, and Marketplace. Next January, the Commission will produce a report with recommendations on how and where costs should be controlled. This report may have profound long-term effects on medicine—including the private practice of medicine as we practitioners and our patients have known it up to now.

Those of us who see patients on a one-to-one daily basis know that the greatest cause for increased overall medical care costs is that more people are requiring and getting more services. When someone else, whether it be the government or an insurance company, is paying all or most of the cost, there is no desire on the patient's part to economize.

Another cause for increased cost of medical care and hospitalization which is frequently overlooked, is "the high cost of paperwork." After two years of research, the Federal Paperwork Commission established by Congress has discovered federal paperwork directly affects consumers. Here are just a few examples revealed in testimony to the Commission:

(1) A major pharmaceutical company showed that the cost of federal paperwork adds 50 cents to the price of each prescription.

(2) Several hospitals reported that federal paperwork done costs them \$4 per patient per day.

(3) A nursing home operator testified that costs for collecting Medicare and Medicaid payments amounted to \$25,000 per year or approximately \$30 per patient per month.

There is no way to find out what the total cost to the federal government (taxpayers) is for the enormous army of bureaucrats who handle federal paperwork on the receiving end. We do know that HEW through contracts is spending about \$300 million this year for the PSROs which were legislated into being as the organization to control health care costs.

All of these factors along with more expensive technological advances, increased employee wages, increased cost of supplies, etc., are reasons for "the rising cost of health care."

The liberal socializers in Washington who are hollering loudest about "the rising cost of health care" are the same ones who propagated the so-called Health Care Crisis a few years back. They want us to hang our heads and shamefully admit that we physicians have made medical care too expensive for most everybody and we should change the whole system of "Delivery of Health Care."

We physicians who are in the best position to see what is taking place must be knowledgeable and willing to speak out and explain why health care costs are rising just like the costs of everything including groceries, gasoline, electricity, and automobiles.

The best medical care in the world is here in the United States and it is expensive. It is obvious, to those who look at what has happened before, that increased government involvement in medical care will make it even more costly.

Sincerely,

David H. Turner, M.D.

PRESIDENT

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JUNE, 1977

editorials

Nashville, '77, or So What Else Is New?

For the first time in nearly 20 years, TMA's Annual Meeting graced the halls of Nashville. Many indicators point to its success. Yet there is one continuing disappointment which carries over from year to year: too few of you are involved in the workings of TMA. Many of you came to your specialty society meetings without ever bothering to register. It wouldn't have taken

much time, and would have been the least you could do.

Though annual meetings are spasms of activity, the real work of TMA is carried on behind the scenes in between, both at headquarters and state-wide, involving numerous committees and just plain concerned members. The record of most of this is buried in committee reports which are not published and which will never again see the light of day. They deserve better. The fact that some of what went on will receive special comment below is not to imply at all that the rest was unimportant.

The most controversial topics addressed at the session were the perennial questions of National Health Insurance and so-called Death with Dignity. Most of the controversy over those questions occurred in reference committees, so that for the most part the House sessions were smooth and expeditious under the expert guidance of Drs. William Edwards and Allen Edmonson, Speaker and Vice-Speaker respectively.

As you are all literate, I am going to assume that you will read and digest the excellent report of the President, Dr. Gordon Peerman, which touches on the major issues faced by TMA under his administration, including professional liability insurance, national health insurance, the Health Planning Act, continuing education, relicensure, quality control, cost containment, and physician distribution. I will also assume you will read the report of the Board of Trustees which concerns their stewardship of the things of the Association through the past year. The Board is a hard working group who in addition to carrying on busy, active practices spend a great deal of their time working for you. (Sadly, it is often unappreciated.) These two reports will give you a pretty good overview of the status quo and "not-so-quo."

As might be expected, as it has done in the past, the Legislative Committee under the leadership of Dr. Morse Kochtitzky worked diligently and long in your behalf, even though you manifested little interest, if attendance at the Legislative Conference in February is any indication. Fewer than a hundred of the 400 invited physicians came.

A friend, who is a good doctor, remarked to me that he has a real beef against TMA staff for letting a bill he was particularly interested in a couple of years ago fail to be enacted into law. I'm sure a lot of you at one time or another have

felt the same way. My only comment is, "Shame on you!" I'll bet no one put the heat on his representatives to pass it. Neither TMA staff nor staff plus the Legislative Committee can either get legislation passed or prevent its passage. The answer is *you!* When 200 or so optometrists or chiropractors descend on Capitol Hill, and no doctors, or at most two or three and our staff representative, are there in opposition, which group is going to get their attention? This has happened time and again. And who gets the blame? TMA!

Friends, the TMA is not the staff, nor the staff plus the officers, nor the Board of Trustees, nor the House of Delegates. The TMA is *you!* If the TMA (that's you) wants or doesn't want legislation, it's up to them (you). The only time in memory that TMA has acted *en masse* and in concert was on the professional liability situation. And it got results. The legislature will listen only when you convince them you believe your cause is just.

This year the pharmacists and consumer advocates succeeded in their three-year fight to allow pharmacists to substitute certain drugs, but TMA was able to make the bill permissive rather than mandatory, so that you can still maintain control over your prescriptions. Only eight drugs are presently affected, but you can look for a continuing effort to broaden the act, as the legislators are convinced, rightly or wrongly, that great savings will accrue to the patients from the purchase of so-called generic equivalents. But there is a major flaw in the bill in the absence of a requirement that the pharmacist pass savings along to the patient. He can charge what he pleases. *He* lobbied.

All sorts of non-MDs are busily engaged in efforts to legally practice medicine. The chiropractors want the same privileges and prerogatives you have, and are lobbying hard. The psychologists want to admit patients to hospitals, and they have a bill before the legislature. The TMA-TNA Joint Practice Committee is addressing the question of prescribing and dispensing of medication by nurse practitioners, and indeed the whole matter of the practice of medicine by "allied health professionals" is of great concern to many Tennessee physicians. Evidence of this is Resolution 2-77 in which the House went on record that in the patient's interest, medical care requires physician participation. A bill which would allow nurses and physician assistants to

prescribe drugs under physician supervision was put over until the next session of the legislature, and so it is now up to you to convince your representative that the prescribing of medication is the practice of medicine and should therefore be reserved to physicians.

An incredibly bad piece of legislation is the bill which will require graduates of Tennessee's public medical schools either to practice for four years in an underserved area of Tennessee or to repay the cost of their education (this is the *actual* cost—not tuition). Anyone not signing such an agreement would be denied admission to the school. This is patently absurd and impractical, and is not the way to induce people to practice medicine in Tennessee, as the legislators and those high in the administration believe it to be. Fortunately, Governor Blanton agreed with the Medical School deans and with TMA and vetoed the bill.

The AMA has become increasingly successful, by formation of a student-resident section, in involving medical students in its affairs. To bring this to state level, the TMA passed a resolution (1-77) to amend its By-Laws so as to grant full membership to medical students, and to recommend similar action to its component societies. The Board and the Committee on Constitution and By-Laws is "to devise methods by which house-staff members and medical students can participate in the business affairs of TMA." Bringing them into active participation in the formative stages of their career should insure continued activity later, and so strengthen the organization.

It is sad that so few of our members are presently involved in the affairs of the Association, and sadder still that maybe 20% of the doctors in Tennessee do not even belong. Perhaps earlier involvement will help turn the trick. It is probably true that few of those to whom this paragraph is addressed will ever see it. A deplorable number of our colleagues go through life practicing medicine with scarcely a thought of organized medicine. When they do think of it, it is usually to condemn it for something they don't like. Many do not see it as even a necessary evil. They view it as totally unnecessary, without recognizing that their ability to practice their art is due in no small part to the activities of a few dedicated people on their behalf.

Maybe it is up to you to evangelize and proselytize.

J.B.T.

Sic Transit Gloria . . .

Blessed is the mighty king who
Sits beside the weakest man and
Thinks of all their similarities.

Calvin Miller, *The Singer*

At the indescribably magnificent exhibit of the Treasures of Tutankhamun I heard a man say, "These crowds are worse than Disney World. It could take us an hour to see it." It was indeed crowded, and the man already had a considerable investment in time, because he would have stood in line at least a couple of hours outside and more inside the museum. But once in, it is beyond comprehension that he should want to spend less than a minute with each of the fifty-odd incredibly beautiful objects of gold, ivory, alabaster and wood, and to rush past the numerous photo murals depicting the interior and exterior of the tomb and the careful excavation and restorative work of Howard Carter. One would have thought his only reason for coming was, as someone gave as his reason for climbing Mount Everest, "Because it is there."

And perhaps it was.

Sadly, this is our reason for so much that we rush around doing. It says a lot about the emptiness of the existence—I hesitate to say life—that so many lead. They (we?) just rush around piling up things and experiences, for no other reason than to say they have them.

"Old King Tut" was nine years old when he began to reign, and he was about 19 years old when he died. Though his life after death would be forever, there would be all sorts of dangers to face, even for a god-king, so there were gods and goddesses to be appeased to keep him and his young wife safe. Because Osiris, the god of the underworld, would give him tasks to be performed, Sawabti, or efigies of workers, were taken along so the king would not have to labor, but could continue his hunting and fishing, and eating and drinking. The tomb was stuffed to capacity with the things which would protect him and help him enjoy his eternal life.

A recently discovered stele has thrown some light on this otherwise virtually unknown reign, and it has indicated the king possessed a high degree of wisdom and social consciousness. Even so, it doubtless never occurred to him that the primary function of everyone in his realm was other than to make certain his every desire was met. And it certainly never crossed his mind that he could not take with him all the things which

filled his tomb. After all, he had always been told he could. He didn't know any better. But we do. Don't we?

J.B.T.

Onward and Upward—Or Something

We are being pushed, shoved, driven or led, depending on your viewpoint, into what I can view only as a national schizophrenia by the cost of medical care, and as often occurs with schizophrenia, paranoia is developing in various segments of society, leading to destructive tendencies, self or otherwise. Two mutually exclusive demands are being made, which I propose to consider briefly, along with some of the mechanisms currently being proposed to attain them.

The first demand is for high quality "health care" which includes, but is not synonymous with, medical care, for all our citizens, regardless of race, creed, color, place of origin—and fiscal means. Now, to say that leads to problems is a vast understatement. It presupposes several things. One is that there will be sufficient personnel and facilities to furnish both preventive health care for the well and medical care for the sick. It presumes also that these will be equally available to President Carter, urban ghetto residents, Indians on western reservations, Mississippi sharecroppers, and what have you. And it ignores the fact that in spite of ample and repeated warnings people continue to smoke tobacco, pop pills, drive while intoxicated, overeat, and do all the things guaranteed to make patients out of well folks.

There are lots of very sophisticated things we can do for and to people, such as replace joints, kidneys or hearts, bypass clogged-up coronary arteries, take people apart both physically and mentally, and sometimes put them back together again, and keep them alive—or at least not legally dead—for years. All of this costs money—lots of money. A person of considerable means can be reduced very quickly to medical indigency. Our betters in Washington have proposed various ways in which to accomplish all of this, most of them unacceptable to those of us on the business end.

They have spent a lot of money piling up bricks and mortar, not to mention expensive equipment, much of it in relatively, if not absolutely, inaccessible areas, and now they are having trouble manning them. Their solution has been two-fold: regulate doctors by telling them

what and where to practice; and turn out more doctors, while also making doctors out of nurses and medical corpsmen. Carried to its logical conclusion, we will develop a race of "Chinese bare-foot doctors." Unquestionably, nurse practitioners and physician assistants have a place as "physician extenders." But not being trained as physicians, they cannot practice medicine. But they may, yet.

To pay for this superb health care system, various plans have been espoused to pay for and run it. Everybody has his plan, and few of the plans take into account the doctor and his wishes. Everybody, including the AMA, has his bill before Congress. This in itself has caused a lot of conversation, anxiety and paranoia in our own ranks, but it is, from the knowledgeable viewpoint of our leadership, the only way in which medicine can get its views considered on Capitol Hill. TMA passed two resolutions about it. One (8-77) was an emasculated apple-pie-and-motherhood type of resolution stating that in any case we don't want the federal government running the plan. (If the nation wants to survive fiscally it had better not.) The other (10-77) lays down guidelines for national health legislation.

President Carter, the labor unions, and now many corporations are committed to passage of some form of national health insurance, and soon. This must be clearly distinguished from a national medical service. The former is a plan to pay for privately performed medical services. The latter is medical service performed by the government. Whether or not the first would inevitably lead to the second is at present moot. We do not presently have a national health insurance plan in effect probably only because the administration and Congress have looked at the tab, and have decided some other things need doing first.

What needs doing first brings me to the second chapter in this rather sordid account. (I promise it will get worse before it gets better.) Having looked at the tab, Mr. Carter and his minions in and outside of Congress have decided that costs need cutting, or at least holding down, so legislation is now before the Congress which would do just that—theoretically. The plan is outlined in the National News in this issue. It would clap a lid of a 9% annual increase on hospital revenue, adjusted for increased occupancy. It would not take into account cost increases, and would therefore be incentive for hospitals to effect economies, as costs have been going up at a rate of about 13%, and a labor-proposed wage in-

crease is going to make it go up even faster.

All this leads to some interesting questions. In the face of a decreased profit ratio, how does one effect economies? Restaurants, as an example, increase prices. Failing that, they hire fewer waiters and make the portions of lower quality food smaller. The service gets bad, and people go elsewhere. Translated into hospitalese, there will be fewer nurses, fewer house officers, less and worse food, and, more important, fewer of those expensive services. The problem is: There ain't no place else to go!

Is President Carter, or his HEW henchmen, going to say that Patient A can receive renal dialysis while Patient B cannot? Or that Patient C can have a coronary artery bypass while Patient D cannot? You had better believe they aren't. There will be guidelines on which—*who* will decide? The doctors, that's who. *You* will wind up being the bastard!

I told you it would get worse before it gets better. Only I can't right now see "better" anywhere on the horizon until the public first receives and then gets tired of inferior care. The British still haven't revolted and elective surgery there has been virtually non-existent for years, but then the British generally are a docile lot. Not so the inhabitants of the US of A—at least not yet.

They can't have it both ways, so how do they want it? By the time they find only one way is possible, and decide which they want, it may be too late. The magnificent medical care system which has been so carefully built over so many years will have disintegrated.

J.B.T.



Request for Information

To the Editor:

I am convinced that lives now needlessly lost due to severe systemic reactions to insect stings could be saved. How? By a greater awareness of the possibility of such fatal reactions plus knowledge of the existence of an insect sting kit. The kit is an emergency first aid measure to stave off anaphylaxis. Because of my convictions I am presently collecting and correlating data on the incidence of such fatalities.

I am especially interested in time lapse between sting and death although information concerning

the following would be helpful: (1) time sequence of symptoms, (2) previous reactions to insect stings, (3) medication on hand at time of sting, (4) type of medication, (5) type of insect, (6) number of stings, and (7) estimation as to whether or not a physician or hospital emergency room could have been reached in time to avoid a fatal outcome.

Thank you.

Claude A. Frazier, M.D.
4-C Doctors Park
Asheville, NC 28801

Complaint

To the Editor:

It was with a great deal of interest that I read the "Many Purposes . . ." of your organization in *The Tennessean* of April 11, 1977.

May I tell you "My" purpose for this letter?

Since you "are the force in the whole realm of medical activities" as well as the "innovators of better health and medical delivery systems," is it not possible to get across to the doctors in your society and organization to make the patient, rather than the dollar sign their first concern?

I am not one to become impressed with how many patients are sitting in an office waiting from 9 until 4, before they are called into the doctor's office (only to be left lying on a table waiting an additional hour before the doctor presents himself). To me this only means "poor organization and planning—nothing else." My time is just as valuable to me as the doctor's time is to him. And, aside from an occasional emergency he should know exactly how long a physical should take—have special days of the week for his physicals—and then arrange his other appointments to where the patient is important and he can take the time to explain and understand him or her. The doctor should know the hypochondriac from the really ill person who never calls or goes to his office unless he or she is almost desperate.

Also, when a patient calls and constantly gets a busy signal that too does not impress me—it only means the girl answering the phone has taken it off the hook and is busy laughing in the back with the other girls—I've noticed this many times!!!

When one finally does get the phone and the doctor is busy (understandably) with a patient, I think it's dreadful that a nurse who has been with him for 25 years and has seen the patient a number of times has to ask your name (and how to spell it) as though she's hearing it for the first time. (Also she does half of the physical).

What I am saying is: if you plan to "improve and expand" medical care services, please make doctors aware "the patient's" needs are far greater than he seems to think or feel.

Please ask your doctors not to allow smoking in their offices. If a person is sick and still smoking why does an equally sick individual need to be subjected to all that smoke, especially when the latter one obviously cares about his health and the former doesn't care about his own or anyone else's?

In the early part of my letter, I mentioned the doctors today seem to be much more interested in the money than the patient!! I resent having to sign in for a "blood pressure check"—taken by the nurse and charged \$15 each time. This is after paying \$96 for a physical plus \$6 for a pap smear, plus \$82 for a treadmill test.

Then if you need to ask the doctor the results of your test he's either out of town, out of the office, or can't come to the phone.

Please don't think this is only one doctor.

I had the most marvelous physician in the world so I know such persons *did* exist. However, he passed away about three years ago and I am still trying to find one who comes only "close" in his attitude toward his patients.

I repeat, I do not run to doctors often (who could afford to, especially when not yet on or near being on Medicare?). But, I learned this past November that I have been having "very high blood pressure for my age" and I have been trying to avoid a stroke or heart attack though there is no such history in my background. I am 5'4½" tall and weigh 123 lb, and I am beginning to believe the new doctors and their bills and attitude towards their patients is enough to give one high blood pressure and hypertension (just sitting in their offices).

Surely something can be done!

In checking with my friends—everyone seems to have the same complaint. Between the "trying to park your car and then waiting for your appointment" one can get sick from those things alone! Plus one feels his doctor just doesn't really care; one is simply a *number* or *thing*.

It is my feeling Medicare and Medicaid have brought this about but "whatever," it should be remedied!

Tel-Med has been the best thing that has come about in the medical profession. One can learn a whole lot more about his particular illness than any doctor I've encountered so far.

If you are able to recommend a doctor of the calibre (should one still exist) I am referring to, I would certainly appreciate hearing from you.

I do hope your organization succeeds in its endeavors as it meets this week "to Better Methods in the Medical Profession." With all the progress and strides made, it seems the doctors do not live up to the Hypocratic Oath (I'd call it more the *Hypocrite Oath*).

Sincerely yours,
Name withheld



Eugene R. Anderson, age 75. Died May 1, 1977. Graduate of University of Tennessee School of Medicine. Member of Chattanooga & Hamilton County Medical Society.

William Craddock, age 48. Died April 18, 1977. Graduate of University of Tennessee School of Medicine. Member of Northwest Tennessee Academy of Medicine.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BEDFORD COUNTY MEDICAL SOCIETY

Lana Beavers, M.D., Shelbyville

BLOUNT COUNTY MEDICAL SOCIETY

James R. Delashmit, M.D., Maryville

James Hoyme, M.D., Louisville

Stephen P. Humphrey, M.D., Maryville

Henry S. Nelson, Jr., M.D., Maryville

CHATTANOOGA AND HAMILTON COUNTY MEDICAL SOCIETY

Paz A. Fernandez-Cruz, M.D., Chattanooga

John Wade Laramore, M.D., Chattanooga

George Her-Ching Lin, M.D., Dayton

Chung-Yuen Liu, M.D., Chattanooga

Ralph Elgin Nipp, M.D., Chattanooga

Francis Pimentel, M.D., Chattanooga

Robert W. Ridley, M.D., Chattanooga

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Hasmukh D. Patel, M.D., Trenton

Harold W. Vinson, M.D., Selmer

KNOXVILLE ACADEMY OF MEDICINE

R. Winn Henderson, M.D., Knoxville

Merrill D. Moore, Jr., M.D., Alcoa

LINCOLN COUNTY MEDICAL SOCIETY

Dushyant N. Bhatt, M.D., Fayetteville

Helen G. Jones, M.D., Fayetteville

David R. McCauley, M.D., Fayetteville

Yashwant P. Patel, M.D., Fayetteville

MARSHALL COUNTY MEDICAL SOCIETY

William S. Poarch, M.D., Lewisburg

MEMPHIS AND SHELBY COUNTY MEDICAL SOCIETY

Harold A. McCormack, M.D., Memphis

D. Jeannette Martin, M.D., Memphis

Ernest H. Mathis, M.D., Memphis

Kit Sanford Mays, M.D., Memphis

Winsor V. Morrison, M.D., Memphis

Robert A. Schriber, M.D., Memphis

Ben Porter Webber, M.D., Memphis

Alvin J. Weber, III, M.D., Memphis

Thomas J. C. Woods, M.D., Memphis

MONTGOMERY COUNTY MEDICAL SOCIETY

Thomas M. Cunningham, Jr., M.D., Clarksville

Michael S. Hall, M.D., Clarksville

Joseph W. Miles, Jr., M.D., Clarksville

Gary Lynn Silvey, M.D., Clarksville

Harold F. Vann, M.D., Clarksville

NASHVILLE ACADEMY OF MEDICINE

Rodger A. Fraser, M.D., Nashville

Roger T. Jackson, M.D., Nashville

A. Knox Patterson, M.D., Nashville

Amos D. Tackett, M.D., Nashville

Richard Bruce Terry, M.D., Nashville

RUTHERFORD COUNTY MEDICAL SOCIETY

S. Frank Carter, M.D., Murfreesboro

WILLIAMSON COUNTY MEDICAL SOCIETY

James E. Manson, M.D., Franklin

Joe P. Moss, Jr., M.D., Franklin

Karen Ann Rhea, M.D., Franklin

personal news

The following physicians have been elected Fellows of the American College of Physicians: *Phillip D. Bertram, M.D.*, Cookeville; *Carolyn M. Chesney, M.D.*, Memphis; *Dean R. Conley, M.D.*, Knoxville; *Abbas E. Kitabchi, M.D.*, Memphis; *John G. Paty, Jr., M.D.*, Chattanooga; *Burton M. Rudolph, M.D.*, Knoxville; *Dwight R. Wade, Jr., M.D.*, Knoxville.

The following physicians have been elected Fellows of the American College of Radiology: *Henry C. Blount, Jr., M.D.*, Chattanooga; *Stephen L. Gammill, M.D.*, Memphis; *Jerry W. Grise, M.D.*, Memphis; *Carl T. Stubblefield, M.D.*, Shelbyville; *Claude M. Williams, M.D.*, Cookeville.

W. Barton Campbell, M.D., Nashville, was elected president-elect of the Middle Tennessee Heart Association. *Gottlieb Freisinger, M.D.*, Nashville, was elected chairman of the board.

John T. Cunningham, M.D., Murfreesboro, has been installed as president of the Tennessee Academy of Ophthalmology.

Albert Dittes, M.D., Portland, was honored by that city with a special day of thanks—Dr. Albert G. Dittes Day—recognizing his outstanding service to the Portland community.

Thomas F. Frist, Jr., M.D., Nashville, has been elected president and chief operating officer of Hospital Corporation of America.

Robert Lash, M.D., Knoxville, has been awarded the Governor's Certificate of Appreciation for his work in emergency medical treatment.

Grant W. Liddle, M.D., Nashville, has received the John Phillips Memorial Award from the American College of Physicians in recognition of his distinguished contributions in internal medicine.

B. J. Smith, M.D., Dickson, has been honored by the Dickson Hall of Fame Committee for his "immeasurable value to the athletic program in Dickson County" by the creation of the Dr. B. J. Smith Award, which will be given annually to recognize the outstanding athlete at the county high school.

Nathan Sugarman, M.D., Kingston, has been honored as "Lion of the Year" for the Kingston Lions Club.

Gus John Vlasis, M.D., Chattanooga, has been elected Grand Master of the Grand Lodge of Masons, state of Tennessee.

programs and news of medical societies

Chattanooga & Hamilton County Medical Society

On May 3, 1977, Dr. Dick D. Briggs, Jr., professor of medicine at the University of Alabama in Birmingham, was the guest speaker at a meeting of the Chattanooga & Hamilton County Medical Society. Dr. Briggs spoke on the subject of "Pulmonary Embolus."

Nashville Academy of Medicine

One of the major objectives of the Academy for 1977 is to "reach out" and be more representative of its membership. In an effort to accomplish this end, the quarterly meetings of the Academy are being held at various hospitals in Davidson County which represent the great majority of the membership. The March meeting was held at Nashville Memorial Hospital in Madison; the May meeting was held at the new Hubbard Hospital, adjacent to Meharry Medical College; the September meeting will be held at Baptist Hospital; and the November meeting will be held at St. Thomas Hospital.

The May 10 meeting of the Academy at Hubbard Hospital was focused on a matter of great immediate concern to the medical profession, as well as the public at large—"child abuse." Studies aimed at the detection and prevention of this disease were presented by three Academy members: Mahin Bayatpour, M.D., associate professor of pediatrics at Meharry Medical College and associate director of the Child Development Center; Sandra Kirschner, M.D., associate professor of radiology at Vanderbilt Medical School; and James O'Neill, M.D., professor and chairman of the Department of Pediatric Surgery at Vanderbilt Hospital and surgeon-in-chief of Childrens Hospital.

national news

From the AMA's Office in Washington, D.C.

Carter Moves to Contain Medical Costs

The Congress has received its first major health bill from the Carter Administration—a massive and complicated program for limiting hospital revenues to a 9% or 10% rise annually. Income from all inpatients, private as well as federal beneficiaries, would be affected.

Hospitals exceeding the allowable increase could be socked with a penalty tax amounting to 150% of the "overcharges." Such offenders also would have to reduce charges the following year.

Physicians' offices were not affected by the proposed legislation, though Health, Education and Welfare Secretary Joseph Califano has indicated this is under study.

The hospital plan received the fanfare of a White House send-off, with a statement by President Carter and White House briefings of affected groups and of reporters. Contrary to some expectations, Carter did not use the plan as the keystone of a major health message to Congress, though he mentioned national health insurance.

"Unrestrained health costs also restrict our ability to plan necessary improvements in our health care system," Carter said. "I am determined, for example, to phase in a workable program of national health insurance. But with current inflation, the cost of any national health insurance program the Administration and the Congress will develop, will double in just five years."

Congressional hearings are expected to open in a few weeks on the hospital program. There's no way the proposal will get through Congress unscathed, experts believe. The lawmakers have been pushing to brake the costs of Medicare and Medicaid, but a cost-control program involving an entire private industry is a different matter. There is almost no sentiment in Congress for a revival of wage-price controls for the economy as a whole.

At the insistence of organized labor, the proposal contains an exemption for hospital wage increases which by itself would appear to blow the 9% restraint out of the water. A hospital could adjust upward its permissible revenue by the amount of any wage increase.

Inpatient revenues of the 6,000 acute-care hospitals in this country are covered. Brand new hospitals, federal hospitals, and hospitals controlled by health maintenance organizations (HMOs) would be exempt.

The legislation also imposes a limit on new capital expenditures, fixing a national level for such expenditures below that of recent years and allocating new capital spending among the states by formula. With

the assistance of local planning agencies, each state would determine how the hospitals can make capital expenditures.

States which operate cost containment programs which are capable of meeting the federal criteria could continue their own regulatory approaches.

President Carter said his program will save about \$2 billion in fiscal year 1978—starting next October. This would work out to over \$650 million in the federal budget, over \$300 million in state and local budgets, and almost \$900 million in private health insurance and payments by individuals. In fiscal year 1980, total savings were put at \$5.5 billion.

The American Hospital Association charged that the control measure "would severely jeopardize the provision of hospital care to the American public." Hospitals and physicians will unite in opposing it, the AHA said.

"This proposal would not only prevent hospitals from increasing services to patients, it would require some to cut back existing services," said J. Alexander McMahon, president of the AHA, at a Washington, D.C. news conference.

"The real victims would be the sick and injured, and for their sake, hospitals across the country will unite to oppose this bill."

McMahon said the Administration's proposal is "extremely complicated and would require a huge bureaucracy to enforce it, further adding to hospital costs." He predicted flatly that Congress would reject the plan.

American Medical Association Executive Vice-President, James H. Sammons, M.D., said that while he could not comment in detail on the President's proposal without study that "the medical profession must be concerned about the impact that this concentration on expenditures will have on the quality and availability of hospital care for the American people."

Walter J. McNerney, president of the Blue Cross Association, said a program to limit the rate of increase in revenues on any segment of the health care industry, whether hospitals or other providers, ought to be designed not only to moderate cost increases but, equally important, to provide incentives for more efficiency within the established revenue restrictions." He urged greater flexibility.

Michael Bromberg, director of the Federation of American Hospitals (FAH) said the proposal "is unfair and arbitrary and it will not work. Not only is it impossible to inhibit inflation by law, but there is a real danger that by legislating a ceiling on hospital costs, the Administration would be directing hospitals to cut back on the quality of health care delivery," he said.

As Carter described his plan, "This legislation is not a wage-price control program. It places no restrictions on the hospital's ability to determine its charges for any particular service. It places no limit on the size of any wage demand or settlement. The

program establishes an overall limit on the rate of increase in reimbursements, permitting doctors and hospital administrators to allocate their own resources efficiently, responding to local needs and individual circumstances."

The cost containment system is "intended to flow directly into a long-term prospective reimbursement system," said Carter. Congress and the Administration are already at work on this long-range system, he added.

Under the bill, the basic limit on increases in total inpatient-care revenues would be set by a formula reflecting general price trends in the economy as a whole, plus an additional amount to accommodate some increase in intensity of patient services.

FTC Power Expansion Proposed

A crucial vote is coming soon on legislation to arm the Federal Trade Commission with strong new powers over business and to expand its authority over non-profit groups including medical associations.

The full House Commerce Committee will be taking up a bill approved recently by the Subcommittee on Consumer Protection. The issue pits consumer against business interests with important implications for the medical community.

The FTC has been very active for more than a year in the medical field, taking actions against medical ethical advertising codes, relative value scales, antitrust inquiries about possible resistance to health maintenance organizations (HMOs), challenging the validity of professional accreditation, among other moves.

Heretofore, the Agency has not had the power to act against non-profit associations without contending that it is dealing with aspects that are essentially commercial. The bill before the House Commerce Committees would for the first time make non-profit, professional groups a clear responsibility of FTC.

The American Medical Association has urged that non-profit organizations not be placed under FTC control.

Testifying against the legislation (H.R. 3816), former Federal Communications Commissioner Newton Minow, speaking for the AMA, warned Congress that an FTC battle could devastate non-profit groups.

"A host of diverse organizations having little or no impact on our economy would become subject to the regulatory jurisdiction of the Commission if this provision is adopted," said Minow. "Organizations such as the Boy Scouts of America, the Democratic National Committee, the National Association for the Advancement of Colored People or the United Fund could suddenly find themselves targets of an FTC investigation . . ."

Under H.R. 3816, the FTC could seize the assets and records of non-profit associations, and levy

finer up to \$5,000 per day. The AMA warned that this extreme power was being granted, not to the normal repository of such authority—the judiciary—but rather to a federal agency.

“The cumulative effect of the vast punitive powers and resources of the FTC would cause all but the most well-financed organizations to succumb to FTC pressures and demands,” Minow said. “It is difficult enough for large business corporations, which can pass such costs on to their customers, to do battle with the government. But for a not-for-profit charitable, scientific, or educational organization such a battle can be totally devastating. The ends of justice are not served where vindication also means bankruptcy.”

Mr. Minow also warned that charities subject to such treatment would be hard-pressed and would be forced to rechannel funds from humanitarian directions to legal protection.

“Every dollar that the American Cancer Society was required to spend on Federal Trade Commission matters would be one less dollar for cancer research.”

Focusing on the health sector, the AMA spokesman pointed out that many aspects of the health field today don't correspond to the free competition model, which is the credo of the FTC. For example, certificate of need requirements, placed on health care facilities by the 1974 Health Planning Act prevent unrestricted and competitive expansion by hospitals.

“The Federal Trade Commission has gone on record as opposing certificate of need laws as anti-competitive,” said Minow. “If these health care institutions are brought within the jurisdiction of the Commission, they will thus be faced with conflicting governmental obligations.” Similarly, the maximum allowable cost regulations mandated that costs for drugs supplied under Medicare and Medicaid should not be established by free market but rather by a price fixed by the Department of Health, Education and Welfare. The AMA spokesman claimed, “Extension of the FTC's jurisdiction to organizations governed by such conflicting policy and regulatory programs would be inconsistent with previous expressions of congressional policy in this area.”

Minow cautioned that the proposed extension of FTC authority would ultimately work against the public interest.

“Professional societies are continually exhorted to exercise more supervision and regulation over the conduct of their members. The Commission, however, would release these individuals from the ethical structures of professional associations and subject the public to action based upon the unrestrained ingenuity of individual professionals with only the government able to guard against any excess.”

Fordham Quits HEW

The short and unhappy bureaucratic life of Christopher Fordham, M.D., has been concluded in a

policy dispute with HEW Secretary Joseph Califano. Dr. Fordham, designated to be the assistant HEW secretary for health, spent several weeks on the job before deciding he had had enough. The physician returned to the University of North Carolina where he heads the medical school.

Dr. Fordham's decision to leave rocked the Washington health establishment and the HEW Department. Fordham concluded the assistant secretaryship had been stripped of authority and that others in the Department, especially Califano, would be calling the shots on health-policy matters.

The nomination of Dr. Fordham was ready to go to the Senate when he made his announcement in a brief letter to Califano citing “deep personal reasons.” The North Carolinian would have been the final member of the HEW top command to be officially seated at the agency.

The delay in filling the spot, and the reason for Dr. Fordham's leaving, is caused by the downgrading of the position as a result of the HEW reorganization in which effective control over Medicare and quality assurance has been taken from the health branch of HEW and given to the new Health Care Financing Administration (HCFA).

U.S. Getting Healthier

The nation's health shows steady improvement, according to a 25-year mortality survey by the National Center for Health Statistics.

Since 1950 the death rate from stroke and heart disease declined steadily in those aged 25 to 74 and deaths from tuberculosis, once a leading cause, now number 3,000 annually.

Dorothy Rice, the director of the Center, told the Senate Health Subcommittee, “The spectacular decline in death rates from heart disease may well reflect improvement in medical care . . . there appears to have been no reduction in the incidence of heart disease during this period of sharply declining mortality.”

The mortality rate from heart disease dropped 30% in those aged 45 to 74, with the biggest gains coming in the last six years.

The death rate from stroke fell even more sharply during this period—a 50% decline for the 45-64 age group and a 45% reduction for those 65 to 74.

The aging of the entire U.S. population is demonstrated by the decline in the overall death rate. After leveling off in the 1960s the death rate has steadily declined in the 1970s and reached an all-time low in 1975 of 8.9 deaths per 1,000 population.

Lung cancer had the biggest jump in death rate, doubling in men and going up four times in women since 1950. The increase has offset declines in the death rate from cancer of the stomach, rectum, cervix, and uterus.

Infant mortality declined from 29.2 to 16.1 deaths per 1,000 live births, but the United States still ranks 15th in infant mortality.

"The total rate . . . masks persistent differences for major population groups," reports Mrs. Rice. The death rate for black infants is 41% higher than for whites, and for black infants the mortality rate during the first four weeks of life (18.3 per 1,000 live births) exceeds the death rate of white infants during their entire first year of life (14.2).

Mrs. Rice attributes this to the high birth rate among black teenagers with the attending lack of adequate prenatal care.

Child Health Legislation Proposed

President Carter has sent an expanded child health screening program to Congress.

The Child Health Assessment Program (CHAP) will replace Medicaid's Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT) for children. The CHAP legislation calls for new spending of \$180 million.

Under the bill, the average federal payment to the states for health care provided to children would rise from the current 55% to 75%.

Benefits would be extended to children under age six whose family income level makes them eligible for assistance but who do not meet additional state eligibility requirements.

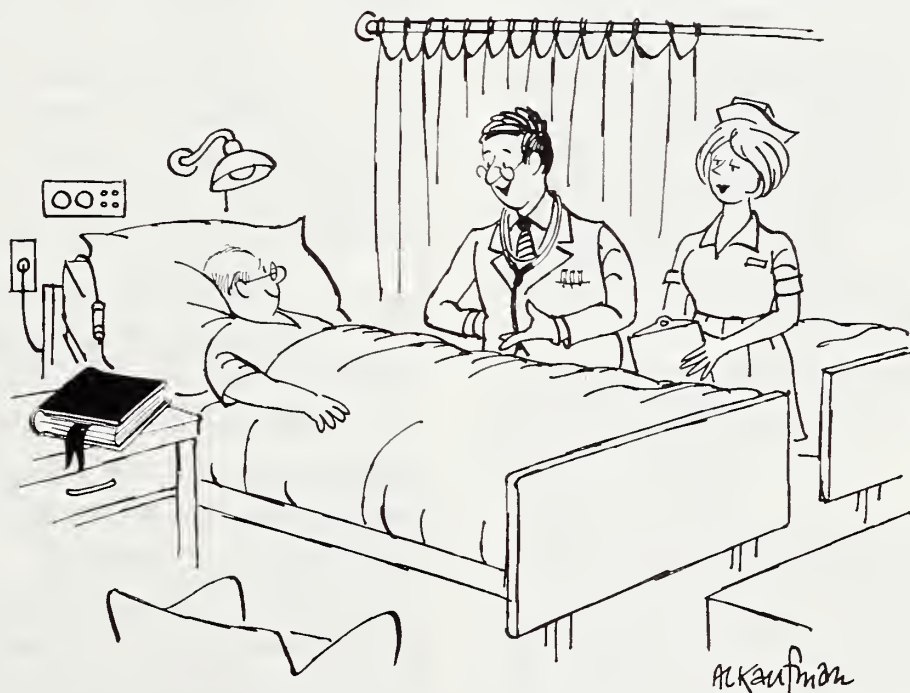
States would be encouraged to assure the availability of comprehensive health providers for low-income children.

President Carter said the CHAP program is "urgently needed to assure that more low-income children receive regular, high-quality primary and preventive care."

announcements

NATIONAL 1977

- | | |
|---------------------|---|
| June 28-
July 4 | International College of Surgeons, U.S. Section, New York |
| July 31-
Aug. 5 | International Congress of Group Psychotherapy, Sheraton Hotel, Philadelphia |
| July 31-
Aug. 5 | National Medical Association, Bonaventure Hotel, Los Angeles |
| Aug. 11-13 | American College of Surgeons, Big Sky, Montana |
| Aug. 20 | American Rhinologic Society & International Rhinologic Society, Kansas City, Missouri |
| Aug. 28-
Sept. 3 | World Congress of Psychiatry, Honolulu |



"CHEER UP REVEREND. WE'LL HAVE YOU UP AND BACK ON YOUR KNEES AGAIN IN NO TIME."



continuing education opportunities

The continuing medical education accreditation program of TMA has full approval by AMA's Council on Medical Education. If the continuing medical education program of your hospital or medical society is accredited by TMA's committee, you may receive for your attendance at its functions Category I credit for the AMA Physician's Recognition Award. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule

Aug.-Sept.	Internal Medicine Intensive Review (11 sessions), Paul E. Slaton, M.D.
Sept. 23-24	Pediatric Cardiology: Seventh Annual Pediatric Symposium, Thomas Graham, M.D.
September	Annual Wm. F. Orr Lectureship in Psychiatry, Marc Hollender, M.D.
Oct. 17-22	Family Practice Intensive Review 1977, Vanderbilt University School of Medicine; Tennessee Academy of Family Physicians, Paul E. Slaton, M.D.

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine

evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

ALABAMA CHAPTER—AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

Update 77—Techniques in Emergency Medicine

Aug. 19-20, 1977—Kahler Plaza Hotel, Birmingham.

For information contact: Dr. John Hard, Chairman of Registration, P.O. Box 2564, Birmingham, AL 35202.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three ten-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 12-Nov. 18, 1977; Jan. 2-March 10, 1978; April 3-June 9, 1978. These courses, designed to provide background, techniques, experience, and knowledge to enable the individual to set up both an ultrasound laboratory and training program, will cover acoustics, instrumentation, scanning and applications to obstetrics, gynecology, ophthalmology, adult and pediatric cardiology, the abdomen, the breast, radiation therapy, the urinary tract, and the nervous system. Participants may attend the entire course or only those portions of interest to them.

For information contact: James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS Regional Meetings, Postgraduate Courses

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category 1 requirements for the AMA Physician's Recognition Award.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Special ACP-MKSAP Courses

The ACP will sponsor 23 courses, providing intensive review of the entire spectrum of medicine, over a five-day (30 hour) period. These courses will differ from any ever presented in that they complement self-learning activities (through the ACP Medical Knowledge Self-Assessment Program—IV) and will also serve to prepare physicians for this fall's American Board of Internal Medicine recertification examination.

MKSAP Course Schedule

August

- | | |
|--------|---|
| 15-19 | Atlanta, GA
Burlington, VT
New York, NY |
| 22-26 | Birmingham, AL |
| 29-9/2 | Baltimore, MD
Seattle, WA |

September

- | | |
|-------|---|
| 7-11 | Ann Arbor, MI
Richmond, VA
San Francisco, CA |
| 14-18 | Kansas City, MO |
| 26-30 | Cambridge, MA
Los Angeles, CA
Philadelphia, PA
Rochester, MN
Washington, DC |

October

- | | |
|-------|---|
| 1-5 | Montauk, LI, NY |
| 3-7 | Cincinnati, OH
Denver, CO
Houston, TX
Pittsburgh, PA |
| 10-14 | Chicago, IL |
| 17-21 | Cleveland, OH
New Orleans, LA |

A catalog on the courses is available by writing: Registrar, ACP-MKSAP Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

AMERICAN COLLEGE OF CHEST PHYSICIANS

Current Status and Controversies in Pacemaking
June 23-25, 1977—Hilton Head Inn, Hilton Head, SC.

Designed for cardiologists, surgeons, and others involved in the clinical use of cardiac pacemakers,

this program's objective is to increase the practitioner's technical understanding of pacing, in order to enhance his clinical skill and his ability to analyze and resolve problems encountered in diagnosing, implanting, and follow-up with the pacemaker patient.

For further information on ACCP programs contact: Dale E. Brady, Director of CME, ACCP, 911 Busse Hwy., Park Ridge, IL 60068.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

Practice Management and Economic Seminar Schedule

Aug. 20-27 Rome, Italy

Oct. 2-9 Key Biscayne, Fla.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

June 13-

July 10 Evaluating Patients with Occlusive Cerebral Vascular Disease, with Noble J. David, M.D., chief of the Neurology Service, Miami Veterans Administration Hospital.

Papilledema vs. Pseudopapilledema: Recognition and Diagnostic Considerations, with Richard E. Goldberg, M.D., director, and Larry E. Magargal, M.D., co-director, Retinal Vascular Unit, Wills Eye Hospital, Philadelphia, and the Retina Unit of Holy Redeemer Hospital, Meadowbrook, Pa.

The Beta Adrenergic Theory of Atopic Disorders, with E. William Rosenberg, M.D., associate dean, University of Tennessee College of Medicine, Memphis; and Andor Szentivanyi, M.D., chairman, Department of Pharmacology, University of South Florida College of Medicine, Tampa.

July 11-

August 7 Drugs and the Menopause Workshop, with John Moyer, M.D., director of professional and educational affairs, Conemaugh Valley Memorial Hospital, Johnstown, Pa.; Elizabeth Connell, M.D., associate director of health sciences, Rockefeller Foundation, New York City, and consultant to FDA Obstetrics and Gynecology Advisory Committee; Herbert Kupperman, M.D., Ph.D., director of endocrinology, Lenox Hill Hospital, New York City; Theodore King, M.D., Ph.D., chairman, Department of Obstetrics and Gynecology, Johns Hopkins Medical School, Baltimore, and chairman of the FDA Obstetrics and Gynecology

Advisory Committee. This presentation is part of the American Society for Clinical Pharmacology and Therapeutics' Drug Spotlight program.

INSTITUTE FOR SEX RESEARCH

Eighth Annual Summer Program In Human Sexuality

July 20-29, 1977—Indiana University, Bloomington.

Designed for individuals in the health professions and related fields, this course includes lectures, panel discussions, audiovisual materials, and attitude reassessment workshops covering sex behavior, socio-sexual issues, and special sexual problem areas. *Contact:* Institute for Sex Research—Summer Program, 416 Morrison Hall, Indiana University, Bloomington 47401.

BOWMAN GRAY SCHOOL OF MEDICINE

Three Days of Advanced Ultrasound of the Abdomen and Obstetrics

Aug. 25-27, 1977—Dutch Inn, Lake Buena Vista, FL.

For information contact: James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

AMERICAN CANCER SOCIETY

Second National Conference on Human Values & Cancer

Sept. 7-9, 1977—The Palmer House, Chicago.

Attendance is open to all interested in understanding the changing role the cancer patient is assuming in our society due to the major advances achieved in diagnosis and treatment during recent years. This conference will explore the impact of cancer on the patient, the family, and the professionals who treat the patient, with emphasis on interpersonal relationships, rehabilitation, employability, insurability, the patient's right to know his diagnosis and prognosis, his spiritual needs, and his hopes for dramatic cures. *Contact:* American Cancer Society, Second National Conference on Human Values & Cancer, 777 Third Ave., N.Y., NY 10017.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

Annual Otolaryngologic Assembly of 1977

Sept. 10-16, 1977—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago

This condensed basic and clinical program for practicing otolaryngologists, presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center, is designed to bring current information in medical and surgical otorhinolaryngology to specialists. *Contact:* Otolaryngology, 1855 W. Taylor St., Chicago, IL 60612.

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

New Treatment Prevents Hyaline Membrane Disease of Premature Infants

A new treatment to prevent hyaline membrane disease is described in the April 25 issue of *JAMA*.

A research project at Roswell Park Memorial Institute, Buffalo, N.Y., confirmed that administration of plasminogen within 60 minutes of birth brings a substantial decrease in severe breathing problems and in death from hyaline membrane disease in premature newborns.

The most common cause of death in both premature and full-term infants in the hours following birth is respiratory difficulty. About half such affected infants are found to have hyaline membrane disease (HMD).

Statistical studies have shown that HMD and respiratory distress is the underlying cause of death in some 9,000 infants each year, approximately 20% of all neonatal deaths.

Clara M. Ambrus, M.D., of Roswell Park Memorial Institute, and colleagues report on a study involving 500 premature infants. Half were treated within an hour of birth with plasminogen. Half received a placebo.

In the 249 infants in the placebo group, 22 had mild and 31 severe respiratory distress. Of the last 31, twenty died; 11 had HMD. In the plasminogen-treated group of 251 infants, mild respiratory distress developed in 19. This is the reverse of the ratio observed in the placebo group, Dr. Ambrus points out. Of the latter 19, six died.

Administration of plasminogen did not change the overall occurrence of respiratory distress in premature infants, but its use often converted a potentially serious disease into a mild one of short duration requiring minimal care.

Plasminogen is given in a single intravenous injection shortly after birth. It can be administered by the family physician, obstetrician, or pediatrician, and a sophisticated intensive care unit is not required.

Mortality caused by HMD in the plasminogen group was about one fourth that in the placebo group.

Sexual Revolution Reflected in Medical Practice in U.S.

The so-called sexual revolution of the past 10 to 15 years is real, America's doctors report.

Two thirds of primary care physicians responding to an American Medical Association poll declare that the sexual revolution has been "markedly reflected" in their day-to-day office practice. The doctors report an increase in requests for birth control information, more requests for abortion information, more incidence of venereal disease, and

more requests from patients for help with sexual problems.

Some of the doctors report they are seeing more sexually related infections and diseases. Many more female patients are now taking the birth control pill. More requests are being received for sterilization, and doctors are being asked about sex after heart attacks. Teenagers are less reluctant to be examined than in the past, and there are more births to younger parents. More teenagers ask for sexual counseling.

Almost half of the physicians in the poll say that patients are asking for sexual counseling much more frequently in recent years.

How competent are physicians in dealing with sexual problems of their patients? Two out of three report they do not believe their medical education equipped them adequately. Doctors under 35 report more training in sexual counseling, indicating that medical schools have begun in recent years to devote more time to the area. But 90% of the respondents declare that medical schools should devote even more time to sexual training.

AMA Proposes Increases in Carter Health Budget

The American Medical Association has suggested a series of increases in President Carter's budget proposals for various health programs.

In letters to congressional leaders, the AMA said it was limiting its recommendations for additional appropriations that would increase the President's budget to "those programs that have the greatest promise for prevention and cost effectiveness to patients, because we realize that economic conditions have put an exceptional strain on scarce federal resources."

The AMA said that much more than the amount it has recommended was needed in some areas, but emphasized its conviction that "no less than the amounts recommended for these programs" should be appropriated.

Since many of the programs emphasize preventive care and are very cost effective, "they represent the best use of scarce fiscal resources," the AMA said.

Among the AMA recommendations:

Maternal and Child Health—The AMA recommends a \$50 million increase over the President's budget figure of \$345,424,000, providing a total of \$395,424,000. This additional amount would allow the states to extend and improve health services for mothers and children, as well as providing additional services to crippled children.

Family Planning—The AMA requests an increase of \$17 million over the President's budget of \$123,165,000. This would provide a total of \$140,165,000, enabling this successful program to expand provision of family planning services to financially disadvantaged and high risk individuals.

National Health Services Corps—The AMA has long supported the NHSC as an effective means of delivering health care to shortage areas. To expand

the scope of NHSC activities, they suggest that the President's request of \$37,590,000 be increased by \$8 million. This provides a total amount of \$45,590,000.

Emergency Medical Service—The AMA recommends that the President's request of \$33,625,000 be increased by \$15 million to \$48,625,000. This additional amount would continue the effort to establish and improve emergency medical services throughout the nation.

Immunization and Venereal Disease Programs—The AMA requests an additional \$8 million over the President's budget of \$19 million. This provides a total of \$27 million. This increase is needed to control such diseases as measles, rubella, polio, mumps, diphtheria, and tetanus. It would also allow an increased capability for targeted immunization programs to stem increases in diseases in disease outbreaks. For venereal disease, the AMA recommends a \$10 million increase over the \$18 million requested by the President for a total amount of \$28 million. This increase would allow an accelerated effort to stem the incidence of these highly communicable diseases which are now at unacceptable high levels.

Lead Based Paint Poisoning in Children—The AMA recommends an increase of \$2.5 million to the President's request of \$8.5 million. This would provide a total of \$11 million. This increase would allow additional assistance to communities in developing child screening and follow-up programs.

Occupational Health—The AMA suggests an additional \$7 million over the President's request of \$49,177,000. This provides a total of \$56,177,000 and this additional amount would provide funds for basic research efforts to assure healthful and safe working conditions.

Mental Health—The AMA believes that the President's request of \$454,049,000 should be increased by \$60 million to a total of \$514,049,000. This additional amount would give the National Institute of Mental Health an increased capability in its work with the states and local communities to prevent and treat mental disorders. We are pleased with the high priority the President has placed on this area of health care.

Alcoholism—The AMA feels the President's requests of \$154,066,000 should be increased by \$30 million to \$184,066,000. This additional amount would allow the National Institute of Alcohol Abuse and Alcoholism to carry out a national program aimed at accumulating and disseminating knowledge to increase the level of awareness regarding the risks and dangers associated with irresponsible drinking and to increase the capacity of the states and local communities to establish and sustain programs of prevention, treatment and rehabilitation.

Health Professions Education—The AMA recommends an increase of \$180 million to the President's request of \$544,619,000. This would provide a total of \$724,619,000. By increasing the funds for health professions schools and student financing, health care can be made increasingly available to

all segments of the population. It would assist in alleviating the maldistribution of health professionals by increasing the available supply of primary care physicians and auxiliary health personnel.

National Institutes of Health—The AMA recommends an increase of \$256 million to the President's request of \$2,567,371,000. This provides a total of \$2,823,371,000. This additional amount would allow increases for those institutes that have demonstrated progress in essential research into the cause and treatment of disease. The budget as proposed would be a step backward for necessary research in cancer, heart, lung, child health and human development, aging, dental, eye, and environmental health services.

Programs for Older Americans—The AMA recommends an increase of \$70 million to the President's request of \$423,450,000. This provides a total budget of \$493,450,000. This additional amount would allow a continued emphasis on service programs that are aimed at securing and maintaining independence and dignity for older Americans and would improve care and services which can prevent or delay institutionalization of the physically and mentally impaired elderly.

Food and Drug Administration—The AMA recommends an increase of \$30 million to the President's request of \$279,258,000 for a total amount of \$309,258,000. This additional amount would allow the FDA to expand its activities to protect the health and safety of the public.

Indian Health Service—The AMA urges that the President's request of \$442 million be increased by \$27 million to a total of \$469 million. This additional amount would allow for the recruiting, training and retention of skilled health professionals to provide improved health care for Indians. It would also permit the renovation and expansion of Indian Health Service facilities which do not meet adequate standards.

Clinical Center Study of Patients with Locally Unresectable Carcinoma of the Pancreas

The cooperation of physicians is requested in the referral of patients with biopsy-proven locally unresectable adenocarcinoma (ductal, acinar, or undifferentiated type) of the pancreas for studies being conducted by the National Cancer Institute's Medicine Branch at the Clinical Center, National Institutes of Health, Bethesda, Md.

Otherwise untreated patients without widespread intra-abdominal or intra-hepatic disease who are ambulatory and under 65 years of age are potentially acceptable. The studies involve intensive treatment with radiotherapy and chemotherapy.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, National Cancer Institute, Bldg. 10, Rm. 12N226, 9000 Rockville Pike, Bethesda, MD 20014; Telephone (301) 496-4916.

How's That Again?

"Excuse me, Senator, but I'd like to ask you about the proposed ceiling on hospital costs."

"What's that? Hospital costs? Yes sir, we've got to do something. Why, it costs a fortune—I mean literally a *fortune*—to spend a few days in the hospital now. Even rich men can't afford to be sick now days. Why, one of my constituents told me that one of his friends . . . I'm sorry young man, I didn't catch your name—you from the press? What's your hometown?"

"No, sir. I'm not from the press. I'm from your hometown and I am Doctor . . ."

"Oh—a doctor! With the AMA boys—right? Well, you can tell them we're going to work closely with them—shoulder-to-shoulder—in their efforts to stem the tide of socialism, ride herd on those wild men in HEW and . . ."

"Senator, I'm afraid you didn't understand. I'm not from the AMA. I live and practice medicine in your hometown. My name is Doctor . . ."

"Wonderful. I think it's marvelous that you doctors will take time out of your busy lives to come to Washington and help us keep things in line. You know I wanted to be a doctor when I was a young man. Would have been, too, if my daddy's luck hadn't run out in '29. Greatest profession there is. Went to law school after the crash. It was closer to home and a lot less expensive. So I had to settle for second best. Only time in my life I ever did, though. Don't like to admit defeat. How long you been practicing medicine Doctor . . . what's that name again? Right there in my hometown eh? You related to old Doc Harlow—his nephew?"

"No sir, Senator. I don't know Doctor Harlow. My name is . . ."

"Well, of course you don't. Old Doc Harlow prob'ly died before you were born. I'm glad to see some younger doctors back home. Need more of them like yourself; up-to-date, enthusiastic, vigorous. Maybe if we get more of you around, we can get you to make house calls again. What can I do for you, doctor? Would you like to watch your Congress in action this afternoon? Be glad to have Miss Rainey show you around the chambers."

"No, thanks, Senator. I wanted to ask you how Congress is going to be able to limit the increase in hospital costs to not more than 9% a year. If their costs go up—social security, minimum wage, liability insurance premiums, gas and electricity bills, well, it just seems to me that . . ."

"You see, doctor, our tasks are never simple. Now you've put your finger on the very essence of

the problem. It's not going to be easy, but we'll work it out. Got a lot of good minds—really good minds here in Washington and if we all work together we can find a way to control those runaway hospital costs. We'd been hoping the hospitals themselves would find ways to economize. But it looks like they're just not getting the job done. They need help and so do the sick folks back home. So, we're going to help them. We're going to get the job done, doctor. And of course, we are grateful for your support."

"But Senator—if health insurance reimbursements continue to be reduced and the costs of operating and staffing a hospital keep going up, the hospitals will be forced to curtail their services to their patients as well as their communities. They'll have no choice. Some of them will be forced to shut down altogether."

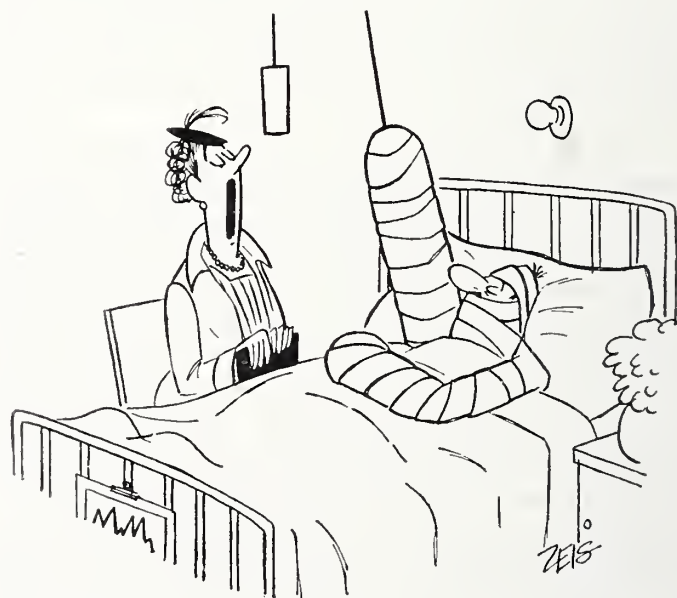
"Well doctor, if they can't find some way to economize and increase their efficiency, maybe they should shut down. After all, we all face the same problems; inflation, inefficiency, fancy offices and fancier equipment. Mark my word, doctor, if the hospital people can't manage with a 9% per year increase in costs, we'll show them how it's done. That's what we're here for. We've done it before. Lots of times."

"I suppose, Senator, you're telling me that you've failed only once in your efforts to control runaway costs by reducing inefficiency and eliminating fancy offices and fancier equipment and all that."

"How's that? Did I say we failed? When was that, doctor?"

"When you just recently raised your own salaries some 27%. And aren't you soon to be awarded another raise—of close to 9%—so that you can keep up with the costs of living, Senator? Or have I been misinformed?"

"Well, perhaps you don't have all the facts, Doctor . . . what's that name again—Harlow?" *MRJ*



"I found out your accident policy covered falling off the roof all right, but not hitting the ground."

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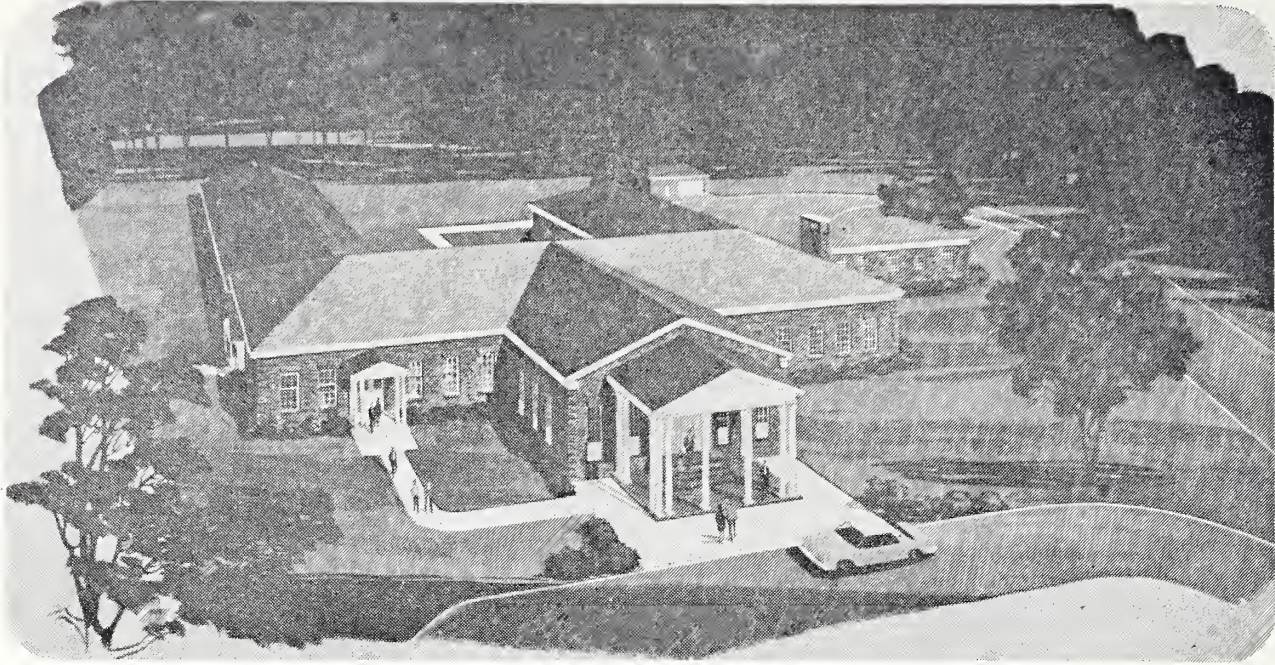
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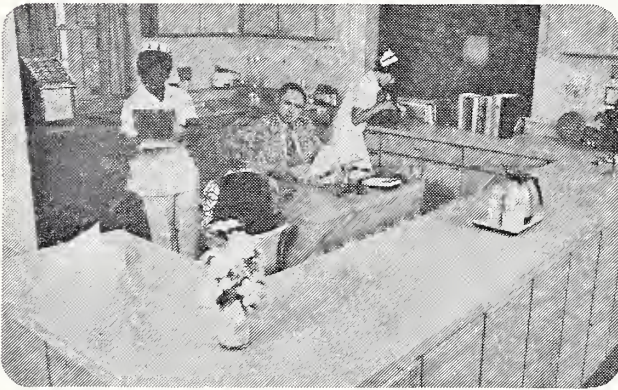
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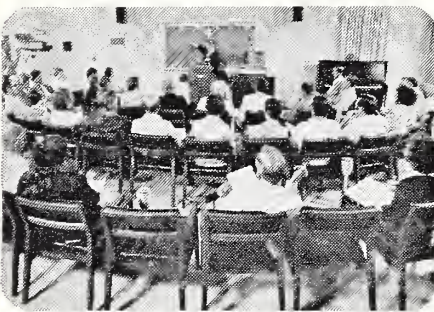
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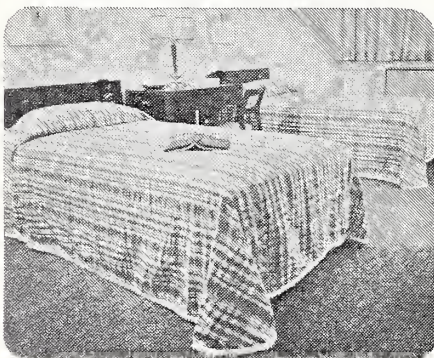
Meditation Trail: A nature trail for hiking and meditation winds through nearly a mile of beautifully wooded area.



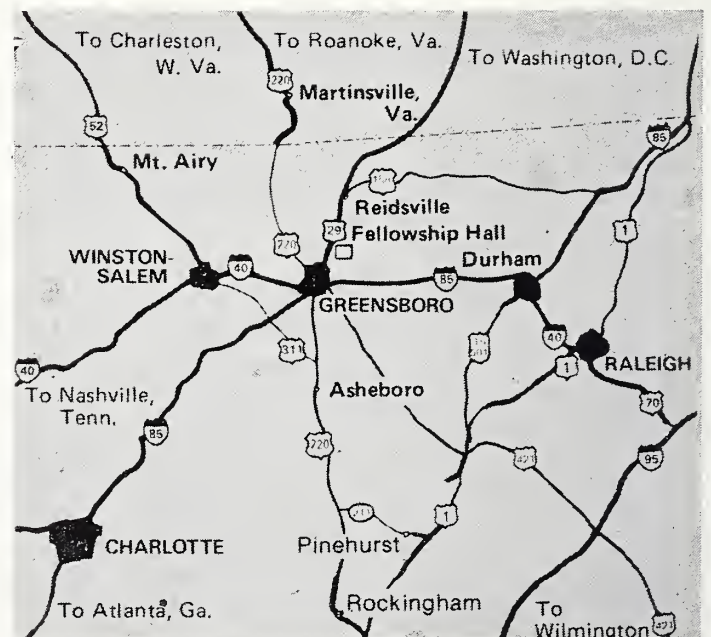
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A Perspective on Health on the Navajo Indian Reservation

HENRY WILLIAMS, M.D.

The Navajo Indian Reservation, home to the largest Indian tribe in the United States, is spread across a rugged southwestern region of desert, mesas, and canyons. The Reservation is the size of West Virginia, or larger than ten of our states; yet its per capita income is less than a fourth that of all U.S. residents, and life expectancy is about 10% less than the rest of the population.

This report will describe some of the medical problems currently facing the Navajo nation, and attempts at solving these problems, as they have evolved. Many of the observations here are based on the writer's experience as a general physician serving in the Public Health Service at the Indian Hospital in Shiprock, N.M. Generally speaking, the way of life prevalent here is quite different from that of most of our technological society. In fact the Reservation may well be worthy of consideration as what has been recently termed a "Third World nation in our midst."¹

The earliest evidence of Navajo existence in the Southwest dates around 1550. Navajo history is marked by clashes with Spanish and American explorers and soldiers. The climax to these events came with the Long March in 1864, when the Navajos were forced by the American Army under Colonel Kit Carson temporarily to leave their land. This exile, which included an attempt to make the Navajos agriculturalists in strange soil, proved to be a failure. In 1868 a treaty was

signed and the people were returned to their land. The Reservation was established, with a right to its own legislature and courts.

Medical care lagged, consisting of the efforts of a few missionaries and government doctors, until 1955 when the Public Health Service (now under HEW) took over the medical program from the Bureau of Indian Affairs. After this change of hands there were new hospitals, health centers, and clinics, as well as a few private programs such as the research-oriented clinic conducted by Cornell University at Many Farms, Ariz. More physicians and other personnel were employed, largely on a short-term basis through the commissioned corps or civil service, administered by the Public Health Service. Many young doctors came in the 1960s as an alternative to the draft; since then the appeal of the Indian Health Service has drawn more on a voluntary basis. Medical care has continued to be provided free of charge. But obstacles such as the language barrier, a decentralized population, and lack of education have made the rampant medical problems a continuing challenge.

The Reservation itself covers 25,000 square miles, the greatest portion located in northeastern Arizona, the rest in northwestern New Mexico and southern Utah. Its population is around 140,000, yet the population growth is 2.5% per year, and the projected population by the year 2000 is estimated at 300,000.

In spite of there being much land, most of it is high desert and 70% is considered useless or nearly so for farming and grazing. Shiprock, in

¹From the Indian Health Service Hospital, U.S. Public Health Service, Department of Health, Education, and Welfare, Shiprock, N.M. Dr. Williams is now with the Department of Medicine, University of Minnesota Hospitals, Minneapolis.

INDIAN HEALTH/Williams

the northeastern corner of the Reservation, benefits from irrigation afforded by the San Juan River; but much of the surrounding land is as yet not arable. Reservation per capita income is \$900¹ (national per capita income in the early 1970s: \$3,680). Unemployment in 1974 was 40%, while in the same period Arizona's unemployment rate was 5.6%.¹ Many of the so-called unemployed herd sheep or engage in native crafts such as weaving or silversmithing, but except for a few their standard of living is generally low. Only 44% of homes have running water and flush toilets, and 59% have electricity.²

The median educational level of adult Navajos remains at the fifth grade,² although this statistic stands to improve considerably in the near future. At any rate, basic education in nutrition and other areas of health remains an unmet need.



Navajo Nation Ambulance

Lack of education is compounded by the rural isolation in which so many families still live. Transportation and distance are real problems in medical care, for while many Navajos now own pickup trucks, the majority of roads are unpaved and many are impassable in winter or after a rain. Failure to keep appointments is thus understandably common, and many sick patients come to the hospital much later than is considered appropriate. Clinics have had to adjust to doing routine follow-up care on a drop-in basis, if at all.

Language is another barrier to ideal medical care. In most areas of the reservation over half of the adult patients speak little or no English. While interpreters are available, this still presents

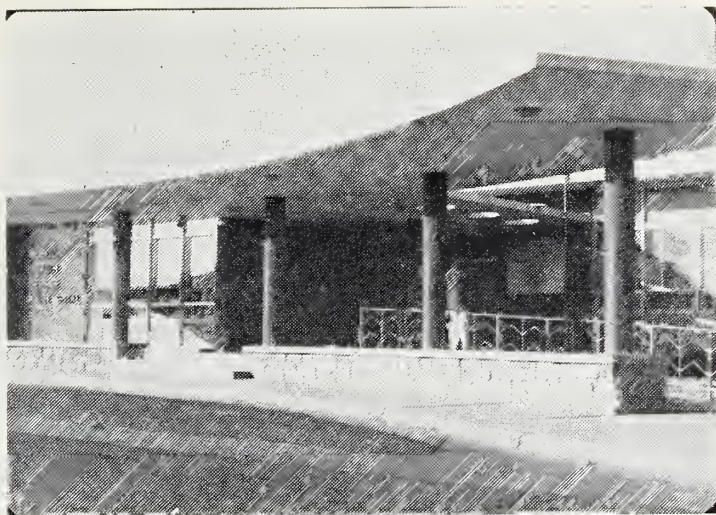


Shiprock Family Practice Clinic—Reception Area

a problem in the physician-patient relationship. Much may be lost in translation of complex instructions or concepts, partly because of lack of equivalence for certain terms in the Navajo language, and patient rapport is often difficult to develop. Also to be considered is the lack of physician continuity, for the majority of physicians are in government service and spend only two years on the Reservation. It is partly for these reasons that the native medicine man, who remains among his people and speaks their language, commands more respect and is accorded more curative powers.

The Navajo life-style is pastoral; the principal on-reservation occupation is sheep-herding. Although many now live in towns, traditionally Navajos live in small family or clan units, scattered across the Reservation in remote areas. Even so, they are inextricably bound together by a complex set of beliefs, legends, and cultural practices. While many Navajos may profess a degree of Christianity, most still uphold their traditional religious beliefs, which are relatively unconcerned with matters of morality and more involved with mystical powers and healing. Traditional practices are directed toward the interests of the individual, around whom communities are organized and have their attention focused in times of need. This aspect of reservation life provides an intrinsic means of meeting medical needs in various ways.

Healing the sick is in fact the central purpose of a majority of Navajo religious ceremonies. A Navajo's central concern is to "walk in beauty," as one song expresses it, or to be in harmony with the forces of nature.³ To be ill is to be out of harmony and requires the invocation of time-honored, complex ceremonies or "Sings" to make things right again and the patient well. These



Shiprock Hospital

rituals serve as community events for large groups in which many of the participants come for the social benefits, yet at the center there is always a sick patient and a medicine man who conducts the healing rites.

A large array of services is in fact available to a Navajo who seeks relief from illness within his own culture. He may seek merely symptomatic relief, and it is not uncommon for one or more members of a clan to be familiar with the various herbs known to be effective for numerous complaints. Such a person is called an herbalist, and may claim to be able to relieve anything from snakebite to venereal disease.

Treatment received in such an informal way as the mere administration of potions, however, can only be considered symptomatic. When an illness is serious or prolonged, the patient's family not infrequently seeks formal help from a medicine man. Recently, for example, a young mother in the Shiprock pediatric clinic hesitated when hospitalization was recommended for her child. Her reason was that prior hospitalizations had not cured her infant's recurrent diarrhea, and she had planned to consult a "hand trembler" so that a Sing could be performed.

Presumably she, like many others, had found the white man's medicine no better than that of the herbalist. What she referred to were the traditional means of seeking an ultimate cure. She sought first a diagnosis, which could be provided by a hand trembler, or visionary capable of invoking the cause of illness and thence the means of cure. Such practitioners practice their art by stargazing, staring, or trembling of the hands in the presence of the patient. A mystical aura is developed in the process, the answer to the patient's problem coming to the practitioner as her hands tremble (the practitioner is often a

woman). She then states what has caused the illness, and prescribes the type of ceremony—and which medicine man—is needed for cure.

Medicine men, or Singers as they are called by the Navajo, are specialists. Each knows only one or perhaps a few ceremonies, which differ according to the type of illness or problem encountered. This is because of the time and intense discipline required to master a Sing, which may take up to five years of concentrated study.⁴ Each autumn in Shiprock it is traditional to hold a Yeibichai ceremony, a widely publicized Sing which lasts for nine days and nights. This is conducted by a medicine man who fills the time with seemingly interminable chants, songs, direction of dances, construction of symbolic sand paintings, and handling of fetishes in special ways. All the attention is directed to one patient, though there are many participants. Most ceremonies are shorter than this one, but all are filled with intricate detail. Most include social gatherings and festivity. A medicine man may be paid up to \$500 for a single ceremony, or the equivalent in livestock or jewelry. He is a respected member of his community, much the same as a family doctor or priest would be in the Anglo world.

Navajos recognize mental and social disturbances as well as physical pain as signs of disease, and there are ceremonies appropriate to each. One type of ritual is conducted primarily for disturbing dreams, for example.⁵ In areas such as these, traditional ways have been observed to be highly beneficial to the patient, and the Anglo medical community has developed liaisons which take advantage of what the medicine men have to offer. Each hospital has at least one trained mental health worker who, along with physicians, may often refer patients with psycho-



Navajo Homestead—Canyon de Chelly

somatic or other psychiatric problems to native medicine men.

Traditional Navajo medicine may in fact benefit a wide range of ills, physical ailments included. In the course of a formal ceremony a patient finds intense psychological and spiritual support, both from the Singer and from the community. Traditional values and powers are invoked, and a sense of security and well-being is attained. Such a cultural tradition has undoubtedly been a key to Navajo survival and identity.

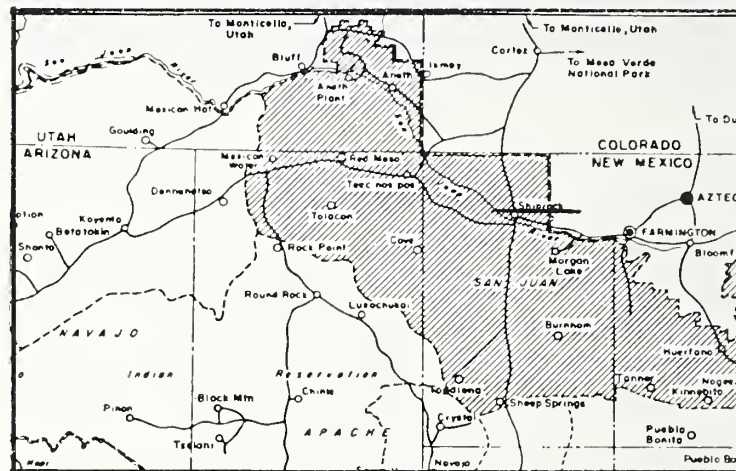
In this cultural setting a young Anglo physician finds himself up against a degree of competition and unfamiliar attitudes. Yet Navajos now are not without appreciation for the services rendered by Western medicine, considering their vast medical need. There is an element of complacency, engendered partly by the fact that medical care is provided free, and partly by the traditional superiority of their native healers. But attendance at clinics on the Reservation is high and has risen significantly in recent years.

Annie Wauneka, a Navajo Tribal Councilwoman since 1951, has done much to promote this change in attitude toward Anglo medicine. Always active in health matters, Dr. Wauneka has played a dynamic role in interpretation and communication among her people. She undertook an educational program in tuberculosis and antisepsis, visiting hospitals and personally persuading patients to accept modern methods of care. She helped produce a motion picture on tuberculosis, initiated a glossary of Navajo-English medical terms, and participated in radio programs on medical topics in the Navajo language. In 1963 she was one of three women named by President Kennedy to receive the Medal of Freedom.⁵

Today the Public Health Service operates six Indian hospitals serving the Navajo Reservation, plus a system of ambulatory clinics which are staffed by physicians full- or part-time. The largest hospital, at Gallup, N.M., serves as a referral center and has a number of specialists. Certain patients such as neurosurgical cases are transported by air to Albuquerque or Phoenix. In addition to the government hospitals there is a Tribal Health Program, which administers various activities including training programs for paramedical employees and emergency medical technicians, and a new family practice clinic in

Shiprock. Private sector offerings are scant, but notable among them is a hospital at Ganado, Ariz., founded by Presbyterian missionaries and presently run by the Navajo Health Foundation.

The hospital at Shiprock has 75 beds, with an occupancy rate of 60% to 70%. It serves a population of 30,000, and in fiscal year 1976 there were 3,509 admissions (fourth highest among Indian Health Service hospitals), about 70,000 outpatient visits, and 812 deliveries. There are 20 physicians on the staff, about half spe-



Map of Four Corners

cialists and the rest general medical officers. Most of the doctors, dentists, nurses, and pharmacists are non-Indian; there are a few Navajo R.N.s and one Navajo physician, Dr. Taylor McKenzie (only two Navajos have been trained as physicians).

There is one operating room, shared by the surgical and OB-GYN services, a two-bed recovery room, and a new intensive care unit, not yet fully staffed. The clinical laboratory is very busy and offers complete routine hematology, chemistry, and microbiology services; but it is plagued by a shortage of personnel, as is the nursing service.

The types of medical problems seen here are considerably different from those in most other areas of the United States. Indian health care in general has been said in recent years to lag 20 to 25 years behind the rest of the United States, considering such statistics as a median age of death for Navajos of 42.3, and a post-neonatal infant mortality rate greater than twice the national average (the overall infant mortality rate is now only 1.2 times the national rate, however).² The most common cause of death is accidents, primarily motor vehicle accidents. Tabulation of recent mortality figures for selected noninfectious and infectious causes of death serves to highlight the differences (Table).

DISEASE SPECIFIC MORTALITY RATES OF SELECTED CAUSES OF DEATH ON THE NAVAJO RESERVATION, FISCAL YEAR 1974, AS COMPARED WITH THE GENERAL U.S. POPULATION, ALL RACES CALENDAR YEAR 1973 (CY 70*²).

Selected Cause of Death	Navajo Disease Specific Death Rate Per 100,000	U.S., All Races Disease Specific Death Rate Per 100,000
Motor vehicle accidents	93.1	26.5
Non-motor vehicle accidents	69.8	28.7
Suicides	9.6	12.0
Homicides	16.4	9.8
Alcoholism	26.6	2.1*
Gastroenteritis with diarrheal disease	7.5	1.1
Tuberculosis, all forms	5.5	1.8
Meningitis	2.0	0.7
Septicemias	4.1	2.2
Other infective/parasitic	4.1	2.3*

* Latest published figures for specific diagnosis was 1970.

Alcoholism is considered by many to be the number one health problem on the Reservation.² At Shiprock in 1975 trauma accounted for over 60% of total surgical admissions, and alcohol was known to be a factor in 46% of these.⁶ It is estimated that up to 40% of all Navajo outpatient visits are alcohol-related.² Patterns of alcoholism are different from those in other segments of the U.S. population, and they vary somewhat according to the degree of acculturation to white society which an individual has undergone. Models of treatment based on experience with non-Indian alcoholics are often unsuccessful. As yet only a few rehabilitative centers have been established, and their services are limited. Unfortunately most medical efforts continue to be focused on acute problems.

A few other diseases pertinent to the Navajo are worthy of mention. Gallbladder disease has been called the "Navajo burden," and so it is as the incidence is higher than in the general population, and the course is often more virulent. One study demonstrated super-saturated bile in the hepatic ducts of Indians and postulated that some derangement of liver metabolism may exist in these patients.⁷ Cholecystectomy was the most frequently performed operation at Shiprock Hospital in 1975. Subacute cholecystitis was the usual condition with advanced scarring, adhesions, and edema. Many patients typically delayed surgery for long periods in spite of repeated episodes of colic.

Heart disease, the leading cause of death in

the United States, is a lesser problem for the Navajo. Navajo mortality from ischemic and cerebrovascular disease combined is 0.43 per 1,000, whereas the U.S. rate for diseases of the heart is 3.6 per 1,000 and for cerebrovascular diseases 1.0 per 1,000.² Rheumatic heart disease is fairly common, reflecting a high incidence of streptococcal disease, whereas coronary heart disease is uncommon. Native medicine men are apparently aware of some of these relative disease incidences. One of the author's patients who was known to have valvular heart disease, after a visit to a medicine man, could not be convinced that the source of his problem was anything other than his gallbladder.

Diabetes mellitus is common, but milder or better tolerated than in the general population. Juvenile diabetes is not seen, and ketoacidotic coma is uncommon. Oral hypoglycemic agents are often used rather than insulin. Tolerance of blood sugars up to 600 mg% for long periods, without acute complications, is common.⁸

Reports vary as to the relative incidence of malignant tumors, but many malignancies have an incidence comparable to that in the general population, such as breast and lymphatic tumors.⁹ Colonic carcinoma is certainly uncommon, comprising only 14% of gastrointestinal tumors in Navajos, contrasted with 45% in non-Indians.⁸

Various infectious diseases pose serious problems for Navajos, as noted in the Table. We see what seems an inordinate number of cases of childhood meningitis at Shiprock, as there is a case on the ward more often than not. Many of these develop complications. Pneumonia is responsible for 6.2% of hospitalizations, and 63% of these occur in patients aged four or younger. Gastroenteritis, in which shigella is often the pathogen, is a very serious problem, with 84% of hospitalizations in the less-than-four age group. Malnutrition may be implicated in many of these cases, and poor sanitation and housing on the Reservation are certainly factors.

Other infections of notably high prevalence include tuberculosis, otitis media, and venereal disease. Navajos are also still occasionally subject to a few diseases peculiar to their geographic area, including bubonic plague and coccidioidomycosis. Trachoma is still endemic; a 4% to 10% prevalence was noted in 1971, but recent figures indicate this has considerably improved.

In spite of what may appear to some a bleak medical setting, it is worthwhile to consider the

INDIAN HEALTH/Williams

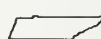
progress that has been made. In the first 15 years since 1955, the Indian Health Service noted that in Indians nationwide infant death rates were down 48%, influenza and pneumonia death rates were down 40%, and tuberculosis death rates down 70%. Hospital admissions had increased by 84%, and outpatient visits were 3½ times higher. Environmental health personnel have constructed thousands of safe water and waste disposal facilities.¹⁰

Much has been accomplished, yet much obviously remains. Dr. Taylor McKenzie believes that a crucial item needed is a medical school for American Indians. This idea has grown out of the facts that few Indians are admitted to American medical schools, and few Indians who have received professional educations have returned to their reservations. An Indian medical school, proposed to be located in the Navajo area, would provide training in a cultural, economic, and medical setting which would encourage graduates to remain with their own people. The Indian Health Care Improvement Act, signed by President Ford in October 1976 and authorizing over \$1 billion in new Indian health care funds, includes a one-year feasibility study for the American Indian School of Medicine. Also included in the bill are funds for a large hospital addition in Shiprock.

The Navajo Health Authority was established by the Tribe in 1972, "to develop health manpower training programs appropriate to support the development of the American Indian Medical School and to meet the needs of the American Indians in staffing their health care systems."¹¹ One of the most visible existing projects of the

Navajo Health Authority is the Family Practice Residency program begun last year at Shiprock. A building was placed adjacent to the hospital for the new Family Practice Clinic, and the first resident arrived in January 1976. Plans are being made to expand the program, which will this year begin training full-time residents affiliated with the University of New Mexico.

Also of note is the NHA's Office of Native Healing Sciences, which was established to promote preservation and utilization of traditional Navajo medicine. The office sponsors an ongoing effort to contact medicine men and enlist their cooperation in such specific areas as the treatment and rehabilitation of alcoholics.

The concept of a "Third World nation" within the borders of the United States is ironic and startling, yet the reality exists. Indian self-determination as well as the Indian Health Service have, however, made great strides in the past 20 years. Working on the Reservation is a fascinating experience, and a rewarding one in an area of such great medical need. 

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FRAUD AND ABUSE: A DISTINCTION

The words "fraud" and "abuse" are often used interchangeably in reporting problems with persons and agencies providing service to Medicare and Medicaid patients. But there is a distinction.

The term "fraud" is defined, for purposes of imposing penalties under the Social Security Act, as the making (or causing to be made) of "any false statement or representation" of a material fact "willfully, knowingly, and with intent to deceive." As such, it is subject to conviction of a misdemeanor and fines.

The term "abuse" may include fraud, but is not necessarily fraud.

The term "abuse" is defined as "a corrupt practice or custom; improper use or treatment; or misuse." The term "abuse" is commonly used to refer to overutilization of medical and health services or the provision of services not considered medically necessary. The criminal intent of "fraud" may be absent in such cases.

Less confusion in the public's mind might occur if the terms were not used interchangeably.

Frank Campion, Director of Public Relations
American Medical Association

The Allergy G.A.M.E.

(Goals, Assumptions, Methods, Ethics)

Part II

ROBERT PRESTON HORNSBY, M.D.

Premature Labeling

The medical director of a large, federally contracted industry had some 6,000 persons under his watchful care. He was concerned. Prepaid health care plans had included allergy diagnostic and treatment services. He wondered if there might be some abuses here. Diverse approaches and expensive protocols, time lost from employment for periodic shots for allergy patients, and frequent treatment failures had him buffaloed. His consultant in allergy was asked to keep one eye open, during the course of a year's monitoring of periodic physical examinees, for unusual occurrences relative to the industry's employees having sought and/or obtained allergy diagnosis and treatment.

Soon there came a particular patient, neither pleased nor disgruntled with his allergy care. He was on vaccine. Yes, he had seen a physician, but only briefly, and only once. Indeed, his allergy tests had been performed by a "paramedical allergist," and all further management had been at the hands of this man. At least two physician offices patronized the services of the paramedical allergist; one of the offices employed him and, at least theoretically, supervised him.

Gentle reader, let us pass quickly over the cost in time and dollars, and proceed to the heart of the matter: Was the patient allergic, i.e., "atopic"? Was his vaccine appropriate? These questions are not hard for us to answer who are trained in accredited training programs, who are current in our postdoctoral and continuing education, and who are periodically reassessed by updated Board exams in our subspecialty. Serum sent to a reputable lab for assay of IgE immunoglobulin and for radioallergosorbent specific IgE antibody assay to the supposed "allergens" detected in skin testing as reported by the patient, revealed a low normal level, not elevated levels, of IgE. (Meaning:

probably not atopic to anything much.) The RAST reports were even more to the point: no atopic antibodies to any of the identified constituents of the skin tests or vaccine. And now, the clincher: at no charge to the patient, repeat skin tests, performed under supervision of a qualified allergist and interpreted by him, were negative for all available commercial aqueous extracts used in the diagnostic workups for atopic disease.

Why, then, the impression of "allergy," i.e., atopy, in the hands of the paramedical allergist?

Before answering this cogent query, let us look further at available data from other persons (patients) similarly handled by the paramedic in that test-and-treat protocol. As luck would have it, subsequently, in the course of the next three years, came a total of five others into my practice. I know of a sixth indirectly, from two next-of-kin, one an R.N. present throughout the allergy testing procedures done by the paramedic.

Of the five, none was found to have elevated serum IgE or positive serum RAST and none was found atopic by scratch testing. One of the five had undiagnosed nasopharyngeal carcinoma, as did the sixth. Diagnoses were made in other hands than those which had referred to and patronized the paramedic.

What went wrong?

Why the premature use of the "allergic" label in these seven persons? We really do not know, perhaps. Yet we know that part of the routine used in the paramedic's protocol is intradermal testing. Since this is a commonly employed modality, let us look very carefully at it, comparing it to the scratch test procedure, where variables can be better controlled.

Concepts of Inflammation¹

There are several interlocking systems of tissue fluid and plasma proteins with enzyme activity, all important in inflammation: those include skin inflammatory responses to needling and to intradermal solutions and their admixtures. We aller-

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gists hope to identify the atopic phenomenon by our skin tests. With scratch tests and scratch tests only, done atraumatically as to pressure and without exposure of capillary bleeding, we *can* do what we are trying to do. But there are five other parallel systems whose activity can be elicited by an intradermal test, and whose evidence of same is seen as "wheal-and-flare," with no meaning at all in terms of atopy. Here they are:

1. Complement classical pathway, with anaphylatoxin from complement factors 3 and 5, activated.
2. Complement alternate pathway (properdin), activated by many bacterial extracts, and yeast cell wall soluble substances such as zymosan.
3. The fibrinolytic pathway.
4. The coagulation sequence.
5. The kinin-generating pathway.

For our purposes, a brief discussion of every one of the above will have to do. Let us start with what scratch tests do and how we arrange positive and negative controls. Scratch tests are simple and accurate. Intradermals *are not, when atopy is at issue.*

Scratch Tests for Atopy

Many allergists have found it useful to incorporate in scratch test trays two negative controls: a plain scratch, and an extracting solution scratch (glycerine, phenol-saline). There are a few people in whom the very scratch will dermatographically give a wheal/flare mimicking (or even representing) a histamine wheal/flare. Others "respond" to phenol-saline with wheal/flare. In my experience, it is the very, very anxious patients who are apt to be dermatographic, especially when masking their feelings, and these will respond with visible skin lesion in the wake of the scratching needle, however lightly applied.

I first added a phenol-saline control for completeness' sake, not knowing what would result. Only very rarely has this "negative" control been met with wheal/flare, and no meaning can be assigned at this time. However, it is an unproven impression that these supersensitive skins include those which also seem not to tolerate average cosmetic abuse.

Positive controls used by many allergists include a histamine scratch test and a scratch with

a histamine-liberator, such as Tween detergent, or perhaps a narcotic (in this office we use dextromethorphan hydrobromide). *Patients failing to respond to the positive controls are not suitable for interpretation of atopy—present or absent.* Weak responders must be interpreted with caution. We have found Valium a common "interfering drug" dampening the response to histamine in scratch testing, not to mention the antihistamines also interfering.

Properly performed, scratch tests are atraumatic; capillaries are not damaged; and there seems less chance of activating any of the five non-atopic pathways by which a wheal/flare may arise when tissues are invaded, as by intradermal needling (exposure to air, stainless steel, allergens and antigens, foreign molarities or pH, and vasoactive water-soluble substances).

"Nonspecific" Wheal/Flare

1. Complement factor activation, classical pathway, will occur when antigen: antibody complexes are formed in tissue fluid and/or plasma.² Split products are formed when C₃ and C₅ activated factor split products are formed (anaphylatoxins). These in turn act via the histamine pathway. Since antigenic substances are being injected into immunocompetent hosts, and since familiar antigens are present in most commercial aqueous extracts of the airborne environmental particulate world we contact and breathe, i.e., dust, dander, molds, pollens, insect fragments, mite material, algae, then complexes with IgG, IgM, and other immunoglobulin classes of antibodies will form in or near the bolus of intradermal skin test extract. Test with sufficient variety of commercial extracts, and there will be "responses"; many of them "false," not reflecting atopy, but normal, expectable, humoral immunity and the resulting complement factor activations. Wheal/flare will result.

2. Activation of late-reacting complement factors will occur with many polysaccharide and endotoxin substances, bypassing the early complement factors (C_{1-4,2,3}).^{2,3} Anaphylatoxin is still generated, immune adherence still occurs, phagocytosis, lysosomal enzyme release, chemotaxis, and cytolysis as in activation of the classical pathway. Either way, the late-reacting factors come into play: C_{5,6,7}, C₈, and C₉. Read at 15 minutes, more or less, the intradermal test may reveal a wheal/flare.

3. & 4. The coagulation and fibrinolytic path-

ways, too, must be considered as subject to influence by intradermal test procedures. This, even though we are not accustomed to think about intradermal needles as impinging on the vascular compartment; yet they do so. Neither are we accustomed to think of intravascular and paravascular phenomena as focal. Usually, we think in terms of a disseminated, widespread process. Yet I submit that we should be ready to apply what is known in the one area to what happens in the other. To do so is to "keep the imagination in focus," I think.

One needs only to recall the storage on platelet surfaces of vasoactive substances, and their release when platelet surface-active events occur, to see ways for wheal/flare to occur via this pathway, too, during the course of intradermal testing. Moreover, the classical and alternate pathways for complement activation also overlap and feed back mutually with the coagulation and fibrinolytic pathways, on the one hand, and the kinin-generating pathways, on the other. One can envision a variety of permutations and combinations, and even day-to-day variability according to endogenous and exogenous influences, as by drugs, hormones, etc.

5. Bradykinin, released by plasma trypsin and kallikrein and perhaps other enzymes, vies with histamine in the minds of students of the inflammatory process who seek for "a single mediator." Surely we would err if we forgot such plasma and tissue fluid polypeptides, and if we failed to study the relationships of these to intradermal skin test extracts and intradermal needling.

Controversial? Yes.

And probably we have erred, in testing for atopy, when departing from simple scratch and/or prick test techniques. I prefer the scratch. I really see no way to dependably "control" the wheal/flare phenomenon when intradermal tests are done; thus they only confuse me *when I use them with atopy in mind*. I have no experience with prick tests. Many trained allergists use them effectively. Intradermal tests are quite useful, in my experience, for assessing delayed immune responses, provided that one checks first at six hours to be sure that the maximal reactivity is not already present (via humoral immunity and complement).

Occasionally at national allergy meetings one meets colleagues who have long ago stopped using vaccine "hyposensitization" therapy altogether. One wonders whether they departed in

some confusion, leaving the field to others, as it were. One would like to know whether intradermal test protocols contributed to their confusion. Many actively practice allergy of the highest quality otherwise; at least one is author of a universally well-regarded textbook, familiar to all allergists and immunologists.

I stopped using intradermal tests for the above reasons, early in my practice of allergy. In the ensuing ten years, I have had no reason to regret this decision, as regards the atopic workup. When others elect to perform intradermals, it may be for a variety of interesting reasons, about which one can only speculate. Nonetheless, my speculations follow:

1. This is how we did it back at my alma mater.
2. It is much faster than scratch testing, for both doctor and patient.
3. It is much more impressive for the patient, and for the insurance carrier. It hurts.
4. The word "scratch" has a variety of pejorative and negative connotations. We do not charge as much for it, either.
5. It produces a vast number of wheals and flares: something can be found "positive" on nearly everybody. The more demons identified and "exorcized" via vaccine treatment, the better.

A Word on Extracts and Vaccines

Persons with normal reticuloendothelial clearance mechanisms and essentially intact immune responses tolerate a lot of portal-of-entry insult. They tolerate a lot of intracutaneous insult, too, without ill effect. And, wonderful to relate, if not surprising, they tolerate a lot of subcutaneous injection of aqueous extracts. (Unpredictable in their responses to vaccine injection, in my experience, are sporadic users of drugs and alcohol. In these I avoid vaccines.)

Vaccines appropriately designed, diluted, and administered are highly useful in many of the atopic disorders, particularly in those of the upper airways and related tissues. They are also very safe, in the hands of cooperative and intelligent people. I think I have not seen many patients who did not fall into both happy categories. In ten years of clinical allergy practice we have taught a large number of patients and their parents and spouses how to follow a home program of vaccine injection buildup and maintenance treatment. We have had some mild systemic re-

actions, some treated in the office, and some in the nearest emergency room. My staff and I can recall fewer than ten such. Never has there been a need for hospitalization because of the reaction; there have been no fatalities.

Ethics in Allergy Practice

This policy has permitted us to encourage the patient to invest his available medical care dollars in environmental modification at home and/or at work. Modification of life-style is not easy for everyone, and when it is a real burden, there are often underlying significant emotional stresses. Helping the patients with these latter—often paramount problems—takes time, skill, and energy. We believe that strategic counseling and active listening are services physicians and other health professionals are best capable of rendering who design treatment programs based on such *real needs* of their patients. Seen as persons who want and need help from allergists, and not just as grist for the mills of allergy labs, patients can and should benefit from allergy services.

It is most unfortunate that third party, sickness insurance carriers have not emphasized *in paid services* the provision by physicians—including allergists—of emotional support services rendered according to specific emotional diagnoses.⁴ These are very real, and are not “diagnoses by exclusion.” This dreadful state should be remedied by all of us who care for our patients. With better balance in philosophy of insurance carriers and their decision-makers, and with better general understanding of diagnostic and therapeutic nomenclature by both the insurance companies and the physicians, we can afford to offer appropriate professional care to troubled persons who present themselves for care in our offices for the practice of allergy.

Germ Theory Revisited

Finally, with less expensive and more pertinent skin testing and vaccine treatment programs, available patient dollars can be invested in more complete diagnostic studies to rule out portal-of-entry infection. The symptoms of a Gram-negative rod chronic nasopharyngitis are often indistinguishable from those of atopy to a non-living inhalant. Nasal eosinophilia can be caused by contaminated, bacteria-rich nose drop and eye drop solutions, as well as by a variety of

contaminated contact lens rinse and soak solutions, when there is bacterial allergy (as in normal persons we can expect and identify). Even positive scratch tests for inhalant allergy may mislead here.

Office bacteriology can be effective, inexpensive, and a sine-qua-non of effective diagnosis and treatment, even in allergy offices. A month of mornings spent in the average hospital bacteriology lab, under supervision, can equip any of us to perform, or to supervise, outpatient bacteriology in our offices, with cultures done at the examining table, paired with stained smears. One may ask whether that office is prepared to diagnose and treat allergic disorders which does not have, or does not use, office bacteriology procedures, including examination under oil with the microscope.

The following acute or chronic upper respiratory infections are diagnosable in the office and do not respond to vaccines: *Staph. aureus*, Group A beta Streptococcus, Gram-negative enterics, Hemophilus spp., Pneumococcus, *Neisseria catarrhalis*, and a variety of less common infections: Herellea, *Mimae polymorpha*, Candida, atypical diphtheroids, and classically pathogenic *Neisseria* spp. Withholding appropriate antibiotics when paired smears show impressive neutrophilia and bacteria intracellularly and extracellularly can certainly be called into question, in my opinion. Likewise, skin infection, primary or secondary, is impossible to diagnose without the timely office bacteriology, and equally impossible to treat definitively.

Ethics in Medicine

Perhaps we may summarize by saying that our ethics must be held both high, to be visible, and reasonable, to be achieved. We must try consistently to improve our diagnostic understanding and techniques, and likewise our treatments. We must give the patient his best buy: the best care available, with most pertinent investment of his dollars spent according to individual need, and not as determined by habit (his or ours); or by the emphasis, carrot-and-stick, of the insurance companies; by neighbors, referring physicians, or by momentary, unspoken fears, hates, desires and fantasies.

We must learn to communicate better with ourselves, our colleagues in the law and in the sickness insurance business, and in lay circles, particularly with politicians and educators, with

the press, and with all other news media. And above all, we must insist that our practical, *patient-centered* experiences be made clear to medical school, postdoctoral, and recertification medical decision-makers. To fail to do these things is to make a mockery of our chosen profession, and to become prostitutes, selling questionable services to the strongest bidders. 

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THE SHARON STATEMENT

IN THIS TIME of moral and political crisis, it is the responsibility of the youth of America to affirm certain eternal truths.

WE, as young conservatives, believe:

THAT foremost among the transcendent values is the individual's use of his God-given free will, whence derives his right to be free from the restrictions of arbitrary force;

THAT liberty is indivisible, and that political freedom cannot long exist without economic freedom;

THAT the purposes of government are to protect these freedoms through the preservation of internal order, the provision of national defense, and the administration of justice;

THAT when government ventures beyond these rightful functions; it accumulates power which tends to diminish order and liberty;

THAT the Constitution of the United States is the best arrangement yet devised for empowering government to fulfill its proper role, while restraining it from the concentration and abuse of power;

THAT the genius of the Constitution—the division of powers—is summed up in the clause which reserves primacy to the several states, or to the people, in those spheres not specifically delegated to the Federal Government;

THAT the market economy, allocating resources by the free play of supply and demand, is the single economic system compatible with the requirements of personal freedom and constitutional government, and that it is at the same time the most productive supplier of human needs;

THAT when government interferes with the work of the market economy, it tends to reduce the moral and physical strength of the nation; that when it takes from one man to bestow on another, it diminishes the incentive of the first, the integrity of the second, and the moral autonomy of both;

THAT we will be free only so long as the national sovereignty of the United States is secure; that history shows periods of freedom are rare, and can exist only when free citizens concertedly defend their rights against all enemies;

THAT the forces of International Communism are, at present, the greatest single threat to these liberties;

THAT the United States should stress victory over, rather than coexistence with, this menace; and

THAT American foreign policy must be judged by this criterion: does it serve the just interests of the United States?

Adopted by *Young Americans for Freedom*
in Conference at Sharon, Conn., Sept. 9-11, 1960.

IMPACT 1977

LAMAR ALEXANDER and FLOYD KEPHART

MR. ALEXANDER: Thank you for the invitation. Dale told you what Floyd and I do, twice a week; we appear on WSM on "Viewpoint." Those of you from the Middle Tennessee area who watch WSM television's evening news will know what this format usually is. It will go something like this: Floyd will state his side of things, then I will give the responsible point of view after that. Now those of you outside the Middle Tennessee viewing area, I think you ought to know how this all came about.

About a year and a half ago, I had the honor of being the Republican nominee for governor in the best Republican year from the Democrats' point of view since 1932. After I was not elected, I put my tail between my legs and went home and was discovered by Floyd and WSM a few months later and asked to do this show. I was highly complimented. Floyd had been a political analyst on this station for six or seven years and they wanted to try this little short two-minute observation on news about twice a week. So they did a great hoopla about it, put up billboards with our pictures on them, ran promotional advertisements, did all sorts of things, and put us on. We invited letters and comments and a few letters would pour in—about one a month. The first month, the letter was favorable. Then there was another letter that came in. It said, "Dear WSM: We've watched your station for many, many

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Mr. Lamar Alexander, 36, the Republican nominee for governor of Tennessee in 1974, is a native East Tennessean and a graduate of Vanderbilt University and New York University Law School. He is a partner in the 16-member law firm of Dearborn and Ewing and was founder of the Tennessee Council on Crime and Delinquency. In 1974, *Time* magazine selected Mr. Alexander as one of the 200 men and women under age 45 destined for leadership in America.

Mr. Floyd Kephart, 34, was born in Georgia and educated at Middle Tennessee State University and Georgetown University. Recognized as an expert in governmental budgeting, he worked as a research assistant in President Kennedy's administration and served as executive director of the State Fiscal Review Committee. He served as director of political affairs of WSM, Inc., from 1970 to 1973 and was NBC's southern consultant for the 1972 Democratic and Republican conventions. Mr. Kephart is president of Capital Development Corporation.

years. It has been our favorite station. We have seen this thing you put on called "Viewpoint" with Mr. Kephart and Mr. Alexander. We have never liked Mr. Kephart. But more important, if any of us had cared anything about Mr. Alexander's point of view at all, we would have elected him governor." So, I have been appropriately put down and we have been doing the program ever since.

What we thought we would do today is kind of difficult for us. As Floyd said last night when we were talking about it, we kind of have a two-minute fail-safe system. That is all they allow us on our little program and we can tell all we know in two minutes. Most people in public affairs can say all they know in 30 seconds and usually do. So, we may stop after two minutes.

We have got two areas we want briefly to touch on: One is Jimmy Carter, our President; the second one is state government. Floyd is going to begin that one. After that, if there is any time left, if any of you want to tell either of us off or ask a question, feel free to do it.

As a general proposition, I don't have any broad basis for criticism of Carter as a President of the United States. Now, that is a pretty simple statement, but I mean it. It kind of goes back to a view I have that there ought to be one President at a time; that it is a little silly to expect any President to come in and within 70, 80, or 90 days, which is about all President Carter has had, do anything. He shouldn't have even claimed to do anything because everybody who is around him knows that he can't do anything in 70 or 80 days.

And, lastly, I think it is wrong to try to second guess what he is doing in foreign affairs and economic affairs yet, because it is a period of testing, a period of settlement, a period of newness, and what may appear to be a wrong move, or an ill-considered move or a bad move, may be a genius stroke; and what may appear to be a wise move, may be the dumbest move in the last 40 years. I think we ought to reserve the option to praise or condemn either.

I had the opportunity to spend about 60 days earlier this year working with the 38 Republican senators who are now in Washington. My impres-

sion is really contrary to what most people think of Washington. I was impressed and inspired, not just because the senators I was working with were Republican, but because I had a strong feeling that the caliber of senators was very high—higher than I had remembered and higher than I had imagined.

When I say that Carter doesn't deserve criticism as a President yet, I don't mean that no one should disagree with him. He has done some things that I don't agree with. The recent blow-up of the SALT talks, for example, was something I am not sure about.

I noticed James Reston called George Kennan who is 77 years old, and announced the other day after the SALT talks broke down that the Carter White House had shown more clumsiness in dealing with the Russians than anybody since 1945. Well, I'm not sure that is true. It may be true. If it is, we are headed probably for a disastrous four years. But maybe he is just trying a new tact.

On the other hand, when he appointed a conscientious objector as head of the CIA, which didn't succeed, it was a bad move. So what! You make a few mistakes. The tax rebate was an absolutely ridiculous idea. The idea of a government \$70 or \$80 billion in debt, going out and borrowing another \$10 billion and sending it back to taxpayers at \$50 a whack takes for granted that everybody in the country doesn't have any sense at all. I think everybody understood that it made no sense and, as a result, yesterday, Carter gracefully backed out of it. What he should be for instead is a permanent tax reduction all across the board. That is the position of the 38 Republican senators, all of them, and I think that made them send back the bill.

Symbolism. I don't even have a lot of criticism for symbolism yet. It is smart to say in Washington that people are looking forward to the Carter Presidency, that is to say, it hasn't started yet. A good argument could be made for that. The symbolism does get in the way of things from time to time. For example, Carter wanted to cut down the size of the White House staff and said, at the same time, that every congressman should call him when he had a problem. Well, what he apparently didn't know is that they all will and did. You go up to see your congressman, and if you are the head of IMPACT and you have a problem, and the President has said the congressman can call him, he will call the President and

say, "I've got Dr. Teague right here and he has got a problem."

Well, that didn't work for very long and it showed really a sort of naivete about the way the structure works. Having said all that I will stop and let Floyd comment. But I do want to say this—that is a rosy picture I've made of a new President and I did it on purpose. But, I think there are some major vulnerabilities. It is not very useful to say much about them because we don't yet know what is really happening. I will list them without commenting on them. I think they are the energy problem, how he deals with it this month; taxes, i.e., is he going to be for a permanent tax reduction or is he going to keep adding to grossness of the federal deficit; the federal budget; national defense. There is all this talk about human rights, which is very hard to disagree with. But is Carter going to produce a military conflict of some sort as a result? Is it a shrewd move or is it just fumbling around in foreign policy? Has he promised too much when he says that at the end of four years, we will balance the budget and have 4% inflation and 4% unemployment at once? Has he got too many rookies in the White House? That was a problem that President Nixon and President Kennedy both had and paid because of it. And, then the question that is greatest—The people who really don't want him to succeed ask in Washington, which I don't ask now but which is a valid question, and may be the worst vulnerability—Does he really know anything about what he is doing?

MR. KEPHART: Well, as usual it is good for Lamar and me to be out among people. I'm kind of interested in what he is saying. He is not interested in what I think, I'm not interested in what I say, so I'm certainly not interested in what he says. This is kind of a unique thing for us, because for over a year we wouldn't appear in a public forum and express our viewpoint. The reason was that Lamar spends so much time practicing law trying to get good at it, that he doesn't have the time to travel around the state and I don't have the money. We have kind of avoided meetings such as these and then Lamar called and he said, "The TMA wants us to come down and do our thing before the IMPACT Breakfast." I said that I would be glad to do it, but I'll be like Flip Wilson at a Ku Klux Klan rally. So, I decided that I would do this anyway. First of all, because I get up early in the morning and there is nothing for me to do until about

nine o'clock. Second of all, because it is always a joy to come out and talk a little bit about politics.

Last night Lamar and I were chatting on the phone about the areas we were going to try to focus in on. Although we had done this about three weeks ago, we had forgotten what we had agreed to do. I began thinking how politicians and doctors are alike. I decided after thinking about it that really politicians and doctors are very similar. The difference is, the doctor says, when you go in for an examination, "Drop your pants and bend over." The politician doesn't give you any warning at all.

I agree with what Lamar said about President Carter. I agree that we don't know much about what he is going to do or when he is going to do it. I think that is perhaps good. The reason I think it is good is that we all kind of knew what Nixon was going to do and what Johnson was going to do before they did it, and we closed our eyes and we said, "I don't think that it will really happen if they get elected," i.e., the White House will change the man. Instead, we elected Lyndon Johnson by a tremendous landslide in 1964 and in 1972 we elected Richard Nixon by the largest landslide in American history and, at the time, I think all of us who work in public affairs knew the caliber of people becoming President of the United States. The White House really didn't change the people; the people changed the White House. Now we have President Carter. Yesterday morning the "Today" show had on three of the major political cartoonists in America. The major criticism the cartoonists made of Jimmy Carter was that he was the same kind of President as he was a candidate. And I don't think that is criticism so much as a compliment. If we can really see a fellow as a candidate and say he is going to be that kind of a public official once elected, then that is what the campaign is about. When we have a candidate who tries to put on one face while running for office and then after he gets elected does something else, then I am really opposed to that. Lamar was not that kind of a candidate. We all knew what kind of a governor he would make and, unfortunately, timing is one of those things which is a great equalizer in character. The strange thing is that Jimmy Carter got elected and is still doing what he said he was going to do during the election. I think he has

taken on a tremendous responsibility in the sense that he has made a lot of promises in vague terms to the American people, some of which I think are impossible to fulfill. I think he is going to try to do it and in trying will make a series of mistakes. I think there are going to be mistakes in programs, objectives, and ways to implement those programs instead of mistakes of confidence and trust, which brings me to the point of the first 60 or 70 days in office.

Obviously, you can't cure inflation or unemployment or balance the budget in 90 or 100 days, a year, or maybe even a term. You have got to make a beginning. You have a much more difficult chore when you have people like me running around talking about what they are doing and trying to find things I can criticize instead of trying to be constructive. You also have a real problem in that you must establish a basis of trust and confidence in your administration and in yourself because of the shambles which were left from the last administration. Fortunately, I think, it has probably been about 40 years or so since those American voters have had to face that in terms of a new President taking office. And, unfortunately, the media that Lamar and I play with have so much of an impact now on what takes place in your mind and your home and the way you see things, that weren't there after the Harding administration, for example.

So, Carter is under the microscope and he is going to be dissected, trisected, and bisected. The question is whether or not he is going to be able to survive to implement his programs with the Congress. The Congress is going to be very difficult for him to deal with, primarily because it is Democratic. I have often said that the only thing worse than being a Republican going before a Democratic Congress is being a Democrat going before a Democratic Congress. The reason is that all those senators and congressmen think they are President. They have not been told yet that the President is only one man. They all think they are President. They run their offices and their lives like they are President. So he is going to have to compete with that, and in the end, I believe Congress will win and with the record of Congress the past few years, at least the past eight years, I would say that means defeat for the American political system unless something really changes. So I think the Carter years are yet to be decided and possibly won't be decided until 1980. I think that from a political standpoint, if

you really want to know what his failures are just wait until 1978 and the election and see if history repeats itself—if the party in power loses its seats in Congress. That is going to be the test at the end of the political campaign.

In terms of state government, to start this little segment off before we throw it open to questions and answers, four years ago—a little longer than that now—1970—Winfield Dunn became the first Republican governor elected in 50 years in Tennessee, and after his administration was over, all of the political pundits said it would be 50 more years before a Republican became governor. Lamar happened to be on the end of that statement instead of the beginning of it. But now, after the Blanton administration, everybody says it is going to be 50 years before the Democrats get back in. And, in Andy Griffith's words "That's how time passes."

The first problem Blanton had on taking office was really major. The governor took office and inherited perhaps the greatest fiscal disaster the state has had. Dunn outspent the ability of the state to pay more than any other governor. He doubled the budget in four years. That is what I call "Republican conservative financing." Governor Blanton took office then, and there was absolutely no way to increase programs, expand programs, or start new programs. Priority had to be totally on the budget. That has been accomplished. It has been accomplished to the detriment of many state programs. But it was a thing that had to be done and it is also a thing that is going to have to be done during the next four years. The truth of the matter is that the state of Tennessee is almost in the same fiscal condition as the social security system. It is almost bankrupt and the only salvation is we have laws that say we can't have deficit financing. It is unfortunate that we really do have deficit financing in the floating of bonds. The state of Tennessee has decided to become the largest real estate agent in the country. And it has built massive buildings, all of which I think should have been financed privately and not financed with state bonds. If I were governor, I would sell them and then lease them back and take the money and retire the bonds. The governor is going to have to continue to sit on the expenditures of the state.

The second major problem that the governor has had is one of not being attuned to what was really needed outside the Capitol area. He was

the governor almost to the extent that Nixon was the President in that he ignored what was going on out in the various departments. And an administrator, which the governor is, can't do that. The state is now a \$2.5 billion corporation annually. You know, you can't just leave that to one catfish fryer from Adamsville. You can't run a state that way.

So, we have got to establish those priorities and try to fulfill them. The governor has been kind of oblivious to that. He has taken all the criticism and strife to the extent that he has ignored it. It is fine for the governor to ignore it, but that means the administrative process suffers until the end of his term.

That brings me to my final point in state government. That is that I am a strong advocate of the governor's being able to succeed himself because I think it is wrong for those of us who vote not to be able to either approve or disapprove the past four years. I think that is what voting is all about, that is what the election system is all about—to decide whether we affirm or disagree with what has gone on. We should take that stand and, hopefully, the people will then allow the governor to serve eight years, instead of four. My personal feeling is that we ought to take all lids off of it. If we like what he is doing, then he ought to be able to stay in there. If not, we ought to throw him out. It is just that simple. I think Lamar will agree as he faces his next race, perhaps in 1978 against the next Democratic nominee, whether it is Jake Butcher, Richard Fulton, or whomever it might be. By the way, we didn't bill this properly. This is a preview of next year's race for governor. In any event, the Democrats are going to have to follow the Blanton administration's record, to a large degree, much as Lamar inherited Winfield Dunn's record, so it is going to be a two-edged sword. The question is going to be who is going to be governor? Lamar . . .

MR. ALEXANDER: Thank you, Floyd. Floyd and I disagree a lot but he says so many things better than I can say them about the Blanton administration. We will kind of leave it at that.

On the things I agree with him about, there are these: 1) I agree with him that there ought to be at least a two-term opportunity for anybody who serves as governor; and 2) I agree that there ought to be a referendum on whether the people would prefer a continuation of Governor Blanton's administration or not. I would like to see that referendum occur.

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I do disagree with him on a point. A lot of propaganda was used in the 1974 general election very successfully by the Democrats and probably wasn't as successfully answered by the Republicans and by those who were defenders of the period between 1970 and 1974 in state government. It should have been better answered, but it is always harder to answer than to attack. Floyd says that under Governor Dunn the state went into some terrible fiscal condition. Well, that is just a lot of nonsense, a lot of political rhetoric. Floyd is a fiscal expert and is free to make those comments. But his point was that the annual state budget went from \$1 billion to \$2 billion. Governor Blanton has been in two years and it is already up to \$2.8 billion and by the time he is out it will be well over \$3 billion. The way I calculate the difference between spending \$2 billion and \$1 billion is \$1 billion. The difference between \$3 billion and \$2 billion is \$1 billion. That is the same. So, if it was fiscally irresponsible for somebody who was trying to install new programs to spend another \$1 billion, then it is even worse for somebody who is not trying to do anything to spend an extra \$1 billion. I think the point ought to be made that when Governor Dunn began his term, the state of Tennessee did not have a single accredited mental health institution. The lowest paid judges in the country were in Tennessee. And, I wouldn't give all that credit to Governor Dunn for the improvement of it because you know he didn't appropriate, the General Assembly did and they are Democrats. I have always thought that the bipartisan progress we made in Tennessee in terms of mental health over the last four or five years, in education and in our judicial system should be equally shared by the Democrats and Republicans. If the Democrats hadn't passed the \$2 billion in the General Assembly and the Republican governor didn't believe in it, none of it would have happened.

There is a larger point that I would make about state government and I will make it quickly. The strongest feeling I had earlier this year in Washington, where I hadn't been really in seven years, was one I hadn't expected. It was the feeling that we read about and hear about and suspect that the power, creativity, jobs, money, opportunities, good life, whatever you call it, is moving toward the Southeast and that the centers of influence in

America, centers of jobs, centers of creativity and influence in the Northeast and other parts of the country are waning, are having problems. There is no question that has happened. There is no question at all. And the great political fight in America, in Washington, is going to be dividing up the pie in a different way over the next 20 or 30 years than we ever have before. The great significant importance to this state is that, more than any other time since the Civil War and probably in our entire history, we should not have to talk about being 48th, 49th or 50th in terms of our economic resources. I am not just talking about well-paid lawyers, well-paid doctors, and well-paid media commentators. I am talking about people in this state who are proud of their state and never have complained much about it but who have basically for 180 years, had a smaller share of the economic pie than people who live in most states of America. They are going to have a shot at doing better. The guy making \$8,000 or \$10,000 will make \$12,000. There are a lot of opportunities for young Tennesseans growing up. They won't have to go to Detroit. They can go to Memphis or Obion County or Carter County or Blount County or places that are industrializing and providing many more good new jobs.

Now, I say all of that about the state because that is the issue and the opportunity in Tennessee. That, I believe, is going to dominate politics in Tennessee for the next five or ten years. The question will be who, which party, which set of legislators, which governor, will provide the leadership to help the most Tennesseans get a larger share of that pie in America that is going to make their family's life better. And, instead of having just a hollow political ring, which I'm afraid it has had for 180 years, it is going to be real. It is going to make elections in 1978, in particular, very, very important.

Questions and Answers

DR. ROY TYRER: After a person has been in 8 or 12 years they would build up a political machine and you couldn't get them out of office.

MR. KEPHART: I think that was true in the 1920s, 30s and 40s. I don't think it has been true since 1960 and the reason is television. In the past, political machines disseminated the information to the counties about what was going

on in state government. The political machine had gotten things done, the political machine covered up news leaks and the political machine got the vote out. Now that is no longer the case. The public official can try to set up an organization in the county, can try to set up an organization that will get him elected. The truth of the matter is that we know so much more about public officials and 35,000 state employees or whoever cannot be united like they used to be. I know when I was on the Hill, in the early 60s, Governor Clement rolled out the organization. In 1962 for example, when I first got back from Washington, we could put 100,000 people in any city we

wanted to, anytime we wanted to. The evolution for that was that by 1964 this had changed to the extent that in the senatorial race, against Ross Bass, Clement did well in that year to draw 40,000 in Lebanon, which was a hot bed of Clementism. You couldn't do it. Television had matured. These little things called remote cameras had gone in and investigations had started occurring and the organization started disseminating and no one has tried to establish an organization in this state any harder than Governor Blanton has and I would bet you odds today that it would be very difficult for him to use that to get elected.



PRAYER

How easy for me to live with You, O Lord!
How easy for me to believe in You!
When my mind parts in bewilderment
or falters,
when the most intelligent people see no further
than this day's end
and do not know what must be done tomorrow,
You grant me the serene certitude
that You exist and that You will take care
that not all the paths of good be closed.
Atop the ridge of earthly fame,
I look back in wonder at the path
which I alone could never have found,
a wondrous path through despair to this point
from which I, too, could transmit to mankind
a reflection of Your rays.
And as much as I must still reflect
You will give me.
But as much as I cannot take up
You will have already assigned to others.

Alexander Solzhenytsin

Adult Respiratory Distress Syndrome

CHARLES E. KOSSMANN, M.D., Editor

Kenneth B. King, M.D.:

The patient was a 24-year-old black male who was well until four days before admission when he developed a nonproductive cough without rhinorrhea, sore throat, or fever. The dry cough continued until the day before admission when he developed fever, hemoptysis, and shortness of breath.

The past history disclosed no previous pulmonary disease. One brother died at age 39 years from a heart attack. The patient smoked one package of cigarettes per day for the preceding two years.

On examination the temperature was 101 F rectally, the pulse rate 122 beats per minute, respiratory rate 58 per minute and the blood pressure 140/82 mm Hg. He was a young obese male in considerable respiratory distress. Examination of the lungs revealed diffuse, fine inspiratory rales and generalized expiratory wheezes. Other than the tachycardia, examination of the heart was negative, as was the remainder of the physical examination.



FIG. 1. Roentgenogram of chest on admission to the emergency room with acute respiratory distress syndrome. There are diffuse, bilateral infiltrates (edema) with heart size just within normal limits.

City of Memphis Hospital Case No. 203372
Presented Aug. 11, 1976

Laboratory data revealed a hematocrit of 50 ml/dl, a white blood cell count of 12,300/mm³ with 21 band forms, 58 segmented forms, 10 lymphocytes, and 11 monocytes in every 100 cells. There were 11 platelets per oil immersion field. Urinalysis was normal. Serum bicarbonate was 21 mEq/l. Admission arterial pH was 7.32 with a PaO₂ of 24 torr and a PaCO₂ of 46 torr. Oxygen saturation (calculated) was 37%.

The electrocardiogram revealed no acute abnormalities. Roentgenogram of the chest showed bilateral diffuse infiltrates (Fig. 1). The sputum appeared to be clotted blood, on which the Gram stain revealed rare Gram-positive diplococci, Gram-positive cocci in chains, and white blood cells. The stain for acid fast organisms was negative. Cold agglutinins were absent. The PPD skin test was negative; immunologic competence was demonstrated by a positive SK-SD skin test.

The initial impression was acute respiratory failure of either infectious or cardiac origin.

The patient was admitted to the intensive care unit and was begun on 40% oxygen by mask with improvement in arterial blood gases as follows: pH 7.41, PO₂ 60 torr, PCO₂ 61 torr. A Swan-Ganz catheter was inserted; the pulmonary occlusion (wedge) pressure was 12 mm Hg. This ruled out left ventricular failure as a cause of the respiratory failure. The following medications were then begun: erythromycin 500 mg IV every six hours to cover the Gram-positive organisms seen in the sputum and the possibility that the etiologic agent might be *Mycoplasma pneumoniae*; aminophylline 75 mg/hr by continuous intravenous infusion; methylprednisolone 250 mg IV every six hours for eight doses. Despite the extreme tachypnea the patient did not become fatigued and did not require intubation. Arterial PO₂ remained above 60 torr on 40% to 50% oxygen administered by an ordinary mask. Hemoptysis ceased in 48 hours and rales in the lungs cleared 72 hours after admission.

The patient was transferred from the intensive care unit on the fourth hospital day when marked clearing of the pulmonary edema had occurred and was discharged after nine hospital days with a normal chest x-ray and arterial blood gases.

Viral serologic studies subsequently revealed that the acute and convalescent sera were both anticomplementary.

WILLIAM I. MARIENCHECK, M.D.:

The case is one of viral pneumonia causing an acute adult respiratory distress syndrome (ARDS). Documentation of a viral etiology of the pneumonia is lacking, although the clinical picture is compatible with it. The patient's life-threatening problem when he entered the hos-

pital was hypoxemia, the major disturbance in all patients with ARDS. The hypoxemia was controlled and the primary process subsequently abated.

Definition

How is adult respiratory distress syndrome defined? There is some controversy in this regard.¹ Some believe that we now have enough sophistication in diagnosing and managing patients with disease states causing acute hypoxemia to stop using the term ARDS. We have been directed to label the basic entities etiologically, e.g., viral pneumonia with severe hypoxemia or acute respiratory insufficiency, rather than using the catch-all term ARDS. Many patients, however, present with profound hypoxemia for which a cause is not apparent or for which multiple factors may be identified, any one of which might produce hypoxemia. Thus most clinicians feel the term is still a useful one. Regardless of the initial or underlying insult the treatment for the resulting syndrome is similar.

ARDS was initially recognized during the Vietnamese conflict in battle casualties suffering extensive hemorrhage or trauma often requiring massive blood transfusions. These young men developed severe hypoxemia and ultimately died of respiratory failure. The terms "shock lung," "Da Nang Lung," and many other synonyms came into usage. In 1967 Ashbaugh, Petty, et al² at the University of Colorado published 12 case studies of patients with physiologic and pathologic findings similar to the type seen in battle casualties. Their patients did not necessarily have extensive trauma or shock; they had developed life-threatening respiratory distress with no previous pulmonary disease after a variety of non-pulmonary or unrelated pulmonary insults. All these patients, regardless of the initial causative insult, appeared with marked dyspnea and tachypnea as did our patient (respiratory rate, 58 beats per minute). Their patients had cyanosis or severe hypoxemia, not greatly altered by oxygen administration. Their lungs were "stiff," with reduced vital capacity and poor compliance. Lastly, the patients all had diffuse pulmonary alveolar infiltrates as revealed by thoracic x-rays.

These findings—tachypnea, dyspnea, increased respiratory effort with low pulmonary compliance, refractory cyanosis and diffuse bilateral pulmonary infiltrates—may complicate a variety of clinical settings.³ These conditions include

hemorrhagic, septic, or cardiogenic shock; massive pulmonary or body trauma, as in the Vietnam experience; virulent and diffuse viral pneumonia; and drug ingestion, including aspirin, opiates, and barbiturates. Aspiration of gastric acid and hemorrhagic pancreatitis can be associated with the same type of syndrome. (The list of conditions associated with the ARDS is growing daily.) Respiratory distress following cardiopulmonary bypass where probably microemboli or circulatory overload has ensued can also cause (or create a reasonable facsimile of) the adult respiratory distress syndrome. High altitude pulmonary edema is probably yet another form.

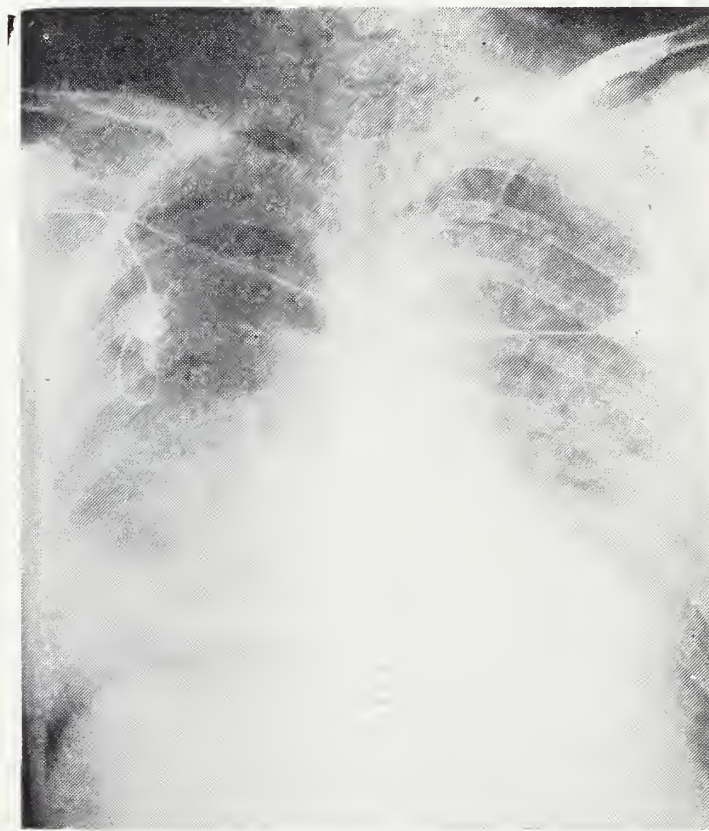


FIG. 2. Roentgenogram of chest of patient with non-cardiac pulmonary edema from aspirin overdose. The fluffy edema, air bronchograms, and normal heart size are to be noted.

Figure 2 is a chest x-ray of a patient who developed ARDS from overdose with aspirin. The x-ray is typical of ARDS. The fluffy shadows are "alveolar." Air bronchograms are apparent. The heart size, even on this portable film, is normal. This patient has what we would describe as pulmonary edema, probably noncardiogenic. When discordant heart (normal size) and lung findings (pulmonary edema) on chest radiograph are matched up with a history, in this specific case of drug ingestion, we come up with the diagnosis of drug overdose or sensitivity associated with ARDS.

Pathology

No pathognomonic pulmonary lesion is seen in the various types of ARDS.⁴ The basic findings on H and E stain of necropsied or biopsied material consist of three components: edema, "congestive" atelectasis, and pulmonary hemorrhage. There are a few exceptions in which a specific etiologic diagnosis can be made on the basis of the histology (e.g., fat globules in fat embolism or organisms in an extensive bacterial or fungal process). Terminally, hyaline membranes and pulmonary fibrosis may appear, caused either by the basic process or resulting from oxygen toxicity. The usual pathology reminded Petty and Ashbaugh so much of what is seen in the neonatal respiratory distress syndrome that they called the state the adult respiratory distress syndrome. In recent years we have come to find that neonatal respiratory distress syndrome pathologically and pathogenetically is probably quite different from ARDS but some similarities do exist.⁵

Hypoxemia—The Common Denominator

The major clinical problem posed by respiratory distress, whether it is ARDS or respiratory insufficiency in a patient with chronic lung disease, is generally hypoxemia. This patient presented with a PO_2 of 24 torr. A PO_2 of 100 torr or so is normal. Hypoxemia is usually defined as an arterial PO_2 of less than 70 torr. Depending upon factors such as color of skin, hemoglobin level, and cardiac output, cyanosis usually appears in patients when the PO_2 falls to less than 60 torr. Hypoxic tissue damage occurs when the arterial PO_2 is 50 torr or less. Death may occur within minutes when the arterial PO_2 drops acutely to 20 torr or less. This patient had severe hypoxemia and I am surprised he responded as well as he did to the relatively low concentration of oxygen administered. Given this clinical presentation I would have contemplated endotracheal intubation immediately upon admission.

Management in View of the Pathologic Physiology

The treatment of adult respiratory distress syndrome regardless of cause is fairly well stereotyped and has been reviewed recently.⁶ Therapy is primarily symptomatic and centers around lung dehydration, measures to check "alveolar-capillary leak," and attempts to prevent or reverse atelectasis. The primary or causative disease if recognized must be treated aggressively.

Lung dehydration is achieved with diuretics and restricted fluids. We try to limit total fluid intake to less than 1,500 or 2,000 ml/day. Swan-Ganz catheter measurements of pulmonary artery and wedge pressures are helpful information in guiding fluid administration as was done in this particular patient. The patients usually have normal pulmonary vascular pressures. When shock exists and left ventricular function is not impaired, or if fluid loading is thought essential to patient survival the necessity for pulmonary hemodynamic monitoring becomes absolute.⁷

The use of corticosteroids is deemed essential by some clinicians but is felt to be adjunctive therapy by most clinical investigators.⁸ We tend to use a high dose methylprednisolone regimen early in patients who seem to be worsening in clinical and gas exchange parameters. Corticosteroid mechanisms of action in this condition are still undefined, but an ameliorative effect on vascular permeability and leukocyte and platelet stickiness has been demonstrated in experimental ARDS models. Whether the corticosteroid actions are operative and beneficial in ARDS patients is not known.

The patient's major problem is hypoxemia, and if he stays severely hypoxic he will die. Hypoxemia in the ARDS is certainly different from that seen in the patient with chronic obstructive pulmonary disease (COPD). The latter often responds well to two liters of oxygen per minute, recovers and is discharged ordinarily after six days of bronchial hygiene. In contrast, the ARDS patient needs high inspired oxygen concentration or mechanical ventilation for survival. The physiologic mechanisms in the two groups of patients are different. In the COPD, ventilation-perfusion relationships are altered, resulting in hypoxemia. Hypoxemia from ventilation-perfusion imbalance responds well to low concentrations of inhaled oxygen.

The major mechanism in ARDS is an intrapulmonic shunt.⁴ Pulmonary shunts are areas in the lung in which there is no ventilation but perfusion persists. Venous blood perfuses a lung segment or region but is not arterialized by exposure to alveolar gas; it subsequently empties into the left atrium, mixing with arterialized blood and, depending on the magnitude of "shunt," causing some degree of hypoxemia. Raising the inspired oxygen concentration when large shunts are present does not improve arterial oxygen content. Patients with ARDS have shunting because

of the extensive atelectasis, edema, congestion, and hemorrhage which prevent the development of satisfactory oxygen concentrations in gas exchange zones of the lung. The shunts persist until that airway or air zone is cleared out or until blood supply to that particular zone ceases.

As stated, ventilation-perfusion mismatches respond to low concentration oxygen and ultimately do well. This patient did have some shunting, however, and continued in respiratory distress for 96 hours.

In the typical ARDS the presence of shunt requires a different approach in correcting oxygen lack. Additional modalities of therapy are usually necessary in this individual to keep him alive since 100% oxygen itself, if used for prolonged periods of time, is deleterious and causes a worsening of the basic pulmonary morbidity. We use high concentrations (50%-60%) of oxygen and if unsuccessful in relieving hypoxemia place the patient on a mechanical respirator as an alternative to using oxygen concentrations in excess of 60% for any extended period of time.

Oxygenation of a patient with ARDS is rarely accomplished with devices which deliver low concentrations of oxygen. These include nasal cannulae, venturi mask, or conventional face masks. These delivery modes cannot achieve inspired oxygen concentrations much greater than 45%. Occasionally, achieving very high O₂ concentrations with a non-rebreathing type mask (with reservoir bag) will suffice and eliminate or delay the need for mechanical ventilation. The inspired oxygen concentration with these masks may be as high as 85%.

Most often patients with ARDS require mechanical ventilation with manipulations of the same machine to overcome the altered physiologic state of the ventilated lung. In order to achieve adequate oxygenation many of these patients initially need 100% oxygen. They also need a technique to open and keep open or splint the atelectatic airways and alveoli that are producing physiologic shunts. The most successful method that has been devised (largely by trial and error by Petty and his group) is called positive end-expiratory pressure (PEEP).^{3,9} PEEP prevents airway pressures, and hence alveolar pressures, from falling to zero, as happens with passive expiration on a ventilator. The patient is ventilated in such a manner as to maintain an end-expiratory positive pressure of from 3 cm to 20 cm of water. By applying a positive pres-

sure to the airways the lungs are splinted in a partially distended state which does not permit total collapse of airways and alveoli. This results in an increase in the functional residual capacity (FRC) or increased gas content of the lung at end expiration and allows ventilation to previously collapsed lung zones. Hence shunting is eliminated or reduced and arterial oxygen tension improves. Reduction in inspired oxygen concentration can then be accomplished.

Prognosis

The mortality from this condition from all causes is very high—around 50%. This mortality rate depends in part on the initiating insult. Some causes (e.g., cardiogenic shock) are almost uniformly fatal, while others (e.g., vascular overload following cardiopulmonary bypass) have a more favorable outcome. The best prognostic indices we have seem to be related to the magnitude and duration of the shunt.¹⁰ Patients requiring 100% oxygen with a persistent alveolar to arterial oxygen gradient of 500 torr for more than 48 hours rarely survive regardless of the initial cause of the injury. In general, the longer the patient requires high concentrations of oxygen to eliminate or alleviate his hypoxemia, the poorer will be his chances of survival.

In summary, a very important pathophysiologic feature of ARDS is alveolar and airway collapse (with reduction in functional residual capacity), atelectasis, and shunting. These phenomena may be treated by use of PEEP. By increasing functional residual capacity, which PEEP does, a reduction in interstitial alveolar edema, an improvement of atelectasis, and a reduction in the effective shunt with relief of hypoxemia may be achieved.

In the last analysis, what is ARDS? Is it a useful concept? I believe we should continue to use the term to denote clinical respiratory distress after a pulmonary insult, either direct or vicarious, which results in progressive pulmonary infiltration and profound hypoxemia. It is a useful clinical concept now but will doubtless be replaced by more specific terms (e.g., noncardiac pulmonary edema) as we begin to unravel the mysteries of alveolar-capillary integrity. 

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Continued on page 502

W. BARTON CAMPBELL, M.D., Co-Director

A 47-year-old man entered Saint Thomas Hospital with severe epigastric and hypochondrial pain of 24 hours' duration. He had no history of cardiac disease. Physical examination disclosed the blood pressure to be 136/80. There were no rubs, murmurs, or gallops audible. He had had no previous electrocardiograms. The following electrocardiogram was obtained (Figs. 1 and 2).

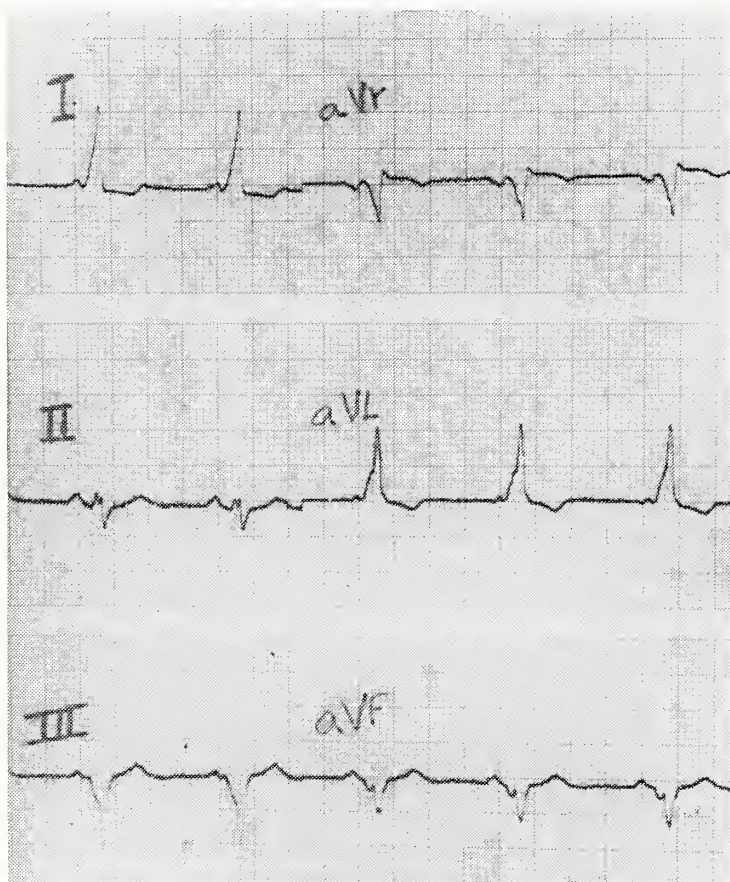


FIG. 1

Discussion

The tracing shows early superior forces resulting in Q waves in III and AVF. This electrocardiogram, however, does not represent inferior infarction. The PR interval in lead I, AVL and the lateral precordial leads is quite short and measures 100 msec in I and AVL. The slurring of the initial portion of the QRS complex (delta wave) in conjunction with the short PR interval is pathognomonic of pre-excitation. Note that the QRS duration is 0.12 sec. It was this observation that initially led Wolff, Parkinson and White to describe this as a type of bundle branch block. It has been subsequently pointed out that pre-

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excitation differs from bundle branch block, however, in that the PJ interval is not notably prolonged. As this patient does not have paroxysmal tachycardia he would not properly be considered to have Wolff-Parkinson-White syndrome.¹

The type of pre-excitation noted in this electrocardiogram suggests the anomalous excitation oc-

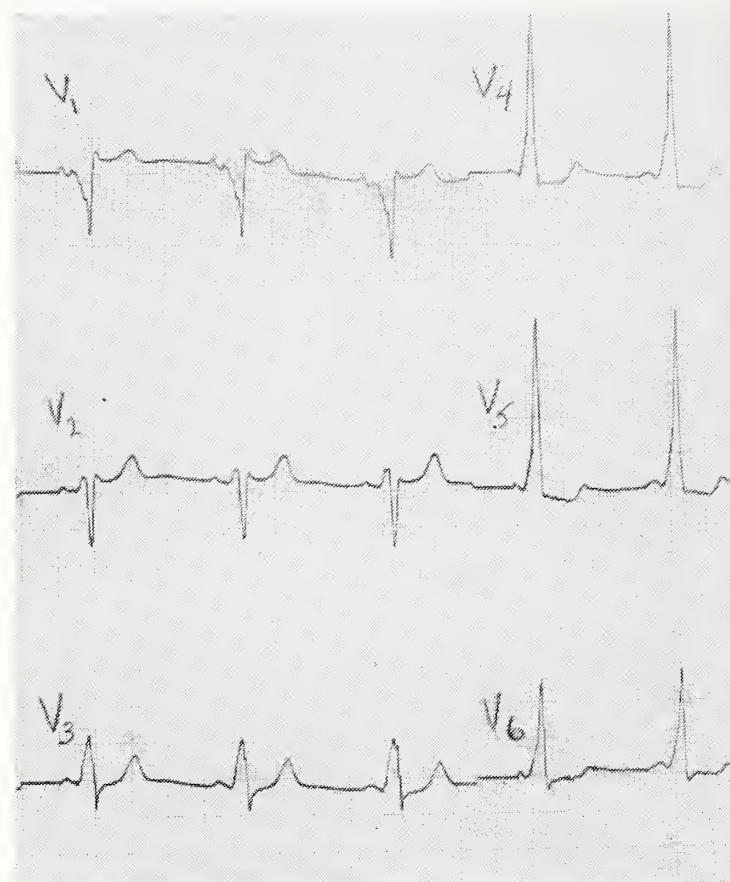


FIG. 2

curs in the right ventricle (Type B of Rosenbaum).² The ST-T changes noted in this tracing are characteristically present in pre-excitation. The ST forces are usually opposite in direction to the major QRS and delta forces. (Note ST segment elevation with an upright T in V1 with negative delta wave and QRS deflection in V1.) The patient from whom this electrocardiogram was obtained was found to have pancreatitis. There was no elevation of cardiac enzymes. The electrocardiogram remains unchanged.

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Ampicillin-Resistant *Hemophilus Influenzae* Meningitis

CHURKU MOHAN REDDY, M.D., FRANK E. THOMAS, M.D., SABURO HARA, M.D.

Ampicillin has been widely recognized as the drug of choice for the treatment of *Hemophilus influenzae* meningitis in children.¹ Administration of antibiotics in the usual outpatient dosages seldom interferes with the diagnosis of *H. influenzae*.² Recently however, several reports of meningitis due to ampicillin-resistant strains of type b *H. influenzae* have been reported.³⁻¹⁰ At least one report of disease due to these strains has been reported in Tennessee.⁹

This communication describes an additional Tennessee case of an infant with partially treated meningitis due to *H. influenzae* type b from which an ampicillin-resistant strain was recovered. Therapeutic modifications are thus suggested when meningitis due to *Hemophilus* is suspected in this geographic area.

Case Report

A 3-month-old black male infant, the product of 32 weeks' gestation with a normal delivery, was admitted to Hubbard Hospital of Meharry Medical College on Nov. 19, 1976. Admitting complaints included a four-day history of irritability, anorexia, and fever. In addition, a grand mal type of seizure was noted two days prior to admission. The neonatal course of this infant has been complicated by hyperbilirubinemia requiring phototherapy.

At the time of admission, the infant was noted to be irritable with a temperature of 39.2 C. Ankle-clonus was present but the anterior fontanel was flat.

The admission lumbar puncture revealed a cloudy cerebrospinal fluid with 840 WBC/mm³, which showed 73% polymorpho nuclear forms. The protein was 147 mg/100 ml and a CSF glucose of 40 mg/100 ml with a concomitant serum glucose of 114 mg/100 ml. The Gram stain revealed Gram-negative pleomorphic rods. The peripheral WBC count was 21,500/mm³ with segmented neutrophils 44%, lymphocytes 56%.

Four days before admission, the patient received ampicillin 250 mg/kg/day orally. On admission, the

infant was started on intravenous ampicillin at a dose of 400 mg/kg/day. Subsequently cultures of the blood and cerebrospinal fluid grew *H. influenzae* type b confirmed by the Tennessee Department of Public Health Laboratories. Disc sensitivity testing on chocolate agar showed resistance to ampicillin. The tests were repeated for confirmation with identical results.

During this time the child remained febrile and showed little improvement. At the receipt of the sensitivity data the infant was promptly switched to chloramphenicol at a dose of 100 mg/kg/day given intravenously at six hourly intervals for a period of 14 days. Temperature returned to normal within 24 hours after the initiation of therapy with chloramphenicol. After an initial seizure on the day of admission, no further seizure activity occurred. Hyperreflexia resolved by the 11th hospital day.

Spinal fluid obtained on the 7th and 13th hospital days showed decreasing WBC counts and protein concentration. The CSF glucose rose to normal levels and cultures remained sterile as did post chloramphenicol blood cultures. The infant was discharged after a three-week hospital stay in a satisfactory condition.

Discussion

Ampicillin has been the drug of choice for the treatment of *H. influenzae* infections in children.¹ However, recent reports of ampicillin-resistant strains has evoked considerations of altering the therapeutic regimen when *H. Influenzae* meningitis is encountered.¹⁰⁻¹²

The case reported herein is an addition to those recorded in the literature in which ampicillin-resistant strains were described.³⁻⁹ Furthermore, relapses have occurred with ampicillin-sensitive strain whereas this has not occurred with chloramphenicol even in the face of low cerebrospinal fluid concentrations.¹²

The ampicillin resistance encountered thus far has been in part on the basis of B-lactamase activity.¹³ Other reasons for ampicillin failure against *H. influenzae* meningitis have been improper routes of administration,¹⁴ inadequate cerebrospinal fluid concentration of the antibiotic,^{15,16} sequestration of organisms in an area not penetrated by the drug^{14,17} and complicating factors such as ventriculitis, brain abscess, and

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hydrocephalus.¹⁴ None of these factors were apparently operative in this case although drug levels were not done. Sensitivity testing by disc method revealed ampicillin resistance. The pitfalls of these methods as opposed to dilution techniques are recognized.¹⁸ However, when one uses chocolatized agar with preparation of the inoculum with enriched media ampicillin resistance is significant.¹⁹

Consequently, the Committee on Infectious Diseases of the American Academy of Pediatrics has recommended ampicillin 400/mg/kg, and chloramphenicol 100 mg/kg/24 hr for the initial management of children with documented or suspected severe infection due to *H. influenzae* type b. Later, when sensitivity results are available, the unneeded drug can be deleted from the regimen.^{10,11}

We certainly concur with this recommendation, and our experience and that of others indicates ampicillin plus chloramphenicol should be the initial regimen in the management of severe infections due to *H. influenzae* type b including meningitis, epiglottitis, and sepsis in this geographic area.

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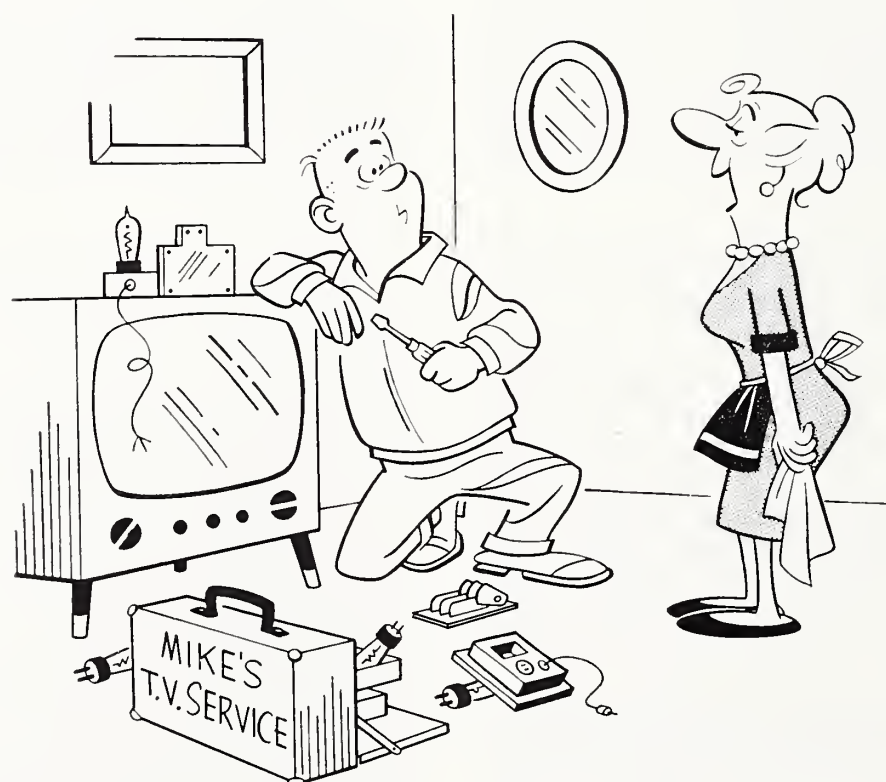
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"IT STOPPED PLAYING RIGHT DURING *MARCUS WELBY*.
WILL MY BLUE SHIELD PAY FOR IT?"

The Use of Radionuclide Cisternography In the Evaluation of Dilated Cerebral Ventricles

PEGGY A. DOMSTAD, M.D.

The recent introduction of computerized tomographic scanning of the head with concomitant estimation of ventricular size has lead to renewed interest in the radionuclide cisternogram. This study, still frequently referred to as "RISA scan," monitors the circulation of tracer material from the lumbar intrathecal space to the convexity of the cerebral hemispheres. The pattern of cerebrospinal fluid circulation and the rapidity of tracer clearance allows assessment of the physiologic significance of dilated cerebral ventricles. The following case illustrates its usefulness:

This 44-year-old female was admitted to the hospital because of constant headache and psychiatric problems. A computerized tomographic scan of the head showed dilated lateral ventricles. A radionuclide cisternogram showed rapid clearance of tracer material with little or no entry into the lateral ventricles and no evidence of intraventricular stasis (Figs. 1 and 2).



FIG. 1

In the normal individual, tracer material, injected via lumbar puncture, rises into the basal cisterns and sylvian fissures during the first six hours after injection. Transient reflux into the lateral ventricles may occur, and may persist at 24 hours post injection. The material leaves the



FIG. 2

lateral ventricles and by 48 hours post injection is distributed over the convexities of the cerebral hemispheres. Normal persons may show even more rapid tracer clearance, as seen in the preceding case. Retention of tracer material in the lateral ventricles at 48 hours post injection is indicative of normal pressure hydrocephalus.

Modifications of this study have been made in recent years rendering it more reliable and quite safe. The first agent widely used for cisternography was radioiodinated serum albumin, also known as "RISA." The use of this material occasionally resulted in aseptic meningitis. Most institutions have discontinued the use of RISA and now use either Indium-111 DTPA or Ytterbium-169 DTPA. These radiopharmaceuticals yield very satisfactory images and adverse reactions are rare.

The radionuclide cisternogram is useful when rigidly interpreted by well-established criteria. It helps clarify the status of individuals suspected of having normal pressure hydrocephalus and aids in predicting the probable outcome of a surgical shunt procedure.

References furnished upon request.

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VICTOR GONCHARENKO, M.D., A. JAMES GERLOCK, JR., M.D., LEIF EKELUND, M.D.

A 5½-year-old male patient presented with the chief complaint of fever and cough. The P-A chest film shown below was obtained. What is your diagnosis?

1. Pneumonia
2. Bronchogenic cyst
3. Abscess
4. Pulmonary sequestration



FIG. 1. Mass in the right lower lung field with an air-fluid level.

Discussion:

Pulmonary sequestration is a congenital mass of aberrant pulmonary tissue that has no normal connection with the bronchial tree or the pulmonary arteries. The mass of aberrant pulmonary tissue is supplied by an anomalous artery arising from the aorta. Its venous drainage is either into

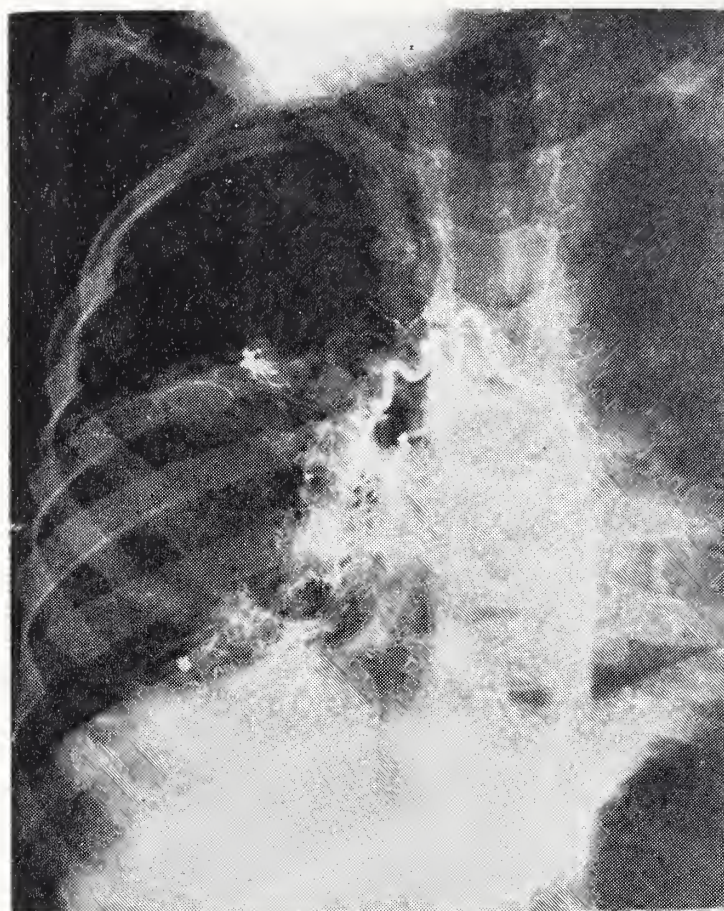


FIG. 2. Selective angiography of the main artery feeding the sequestration. This artery arises from the descending thoracic aorta.

the azygos system, the pulmonary veins, or the inferior vena cava.

Pulmonary sequestration can be either intralobar or extralobar. The intralobar sequestration is found within the lung, usually located in the posterior basal segment of the left lower lobe. No pleural covering surrounds the surface of the intralobar sequestered pulmonary segment. The bronchi within the sequestered lung segment do not communicate with the bronchi of the surrounding normal lung. Since there is no pleural covering surrounding the intralobar sequestered pulmonary segment, air may enter this segment from the normal surrounding lung through the pores of Kohn.

Extralobar sequestration is rare and completely enclosed in a pleural covering of its own. The extralobar type of pulmonary sequestration may be found between the lower lobe and the diaphragm, within the diaphragm, or in the upper

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Hypertension and the Sympathetic Nervous System

DAVID ROBERTSON, M.D.

The lay public has long been convinced that there is a close relationship between a nervous temperament and hypertension. With the rapid acceleration in our understanding of events at the neuronal level in the 1950s, great strides were made in treatment of hypertension by agents acting on the sympathetic nervous system. However, efforts to incriminate the autonomic nervous system as the cause of hypertension were unsuccessful.

Interest in the sympathetic nervous system and its contribution to essential hypertension has been rekindled in the past five years. This is due to improved techniques for measuring catecholamines and their metabolites and the recognition of the importance of categorizing essential hypertensive patients on the basis of their renin status. Patients with persistently low plasma renin activity appeared clinically to have a volume-dependent hypertension while the normal and high-renin essential hypertensive patients include a group with certain characteristics suggestive of increased sympathetic nervous activity.

In the borderline hypertensive patients, the "adrenergic" appearance may be even more striking: these subjects frequently have a raised cardiac output, an increased resting pulse, an increased ratio of stroke volume to central blood volume with an overall reduced blood volume, or a central redistribution of a normal blood volume. All these hemodynamic characteristics are consistent with increased sympathetic nervous function.

Norepinephrine is the principal neurotransmitter of the sympathetic nervous system. While neurons possess a norepinephrine pump to reclaim the neurotransmitter that remains in the synaptic cleft following discharge, small amounts of the norepinephrine are metabolized or lost into the blood stream from which they are ultimately

excreted in the urine. In circumstances of increased sympathetic nervous activity in normal subjects (exercise, pain, sodium depletion, upright posture), that increased activity is reflected in greater blood levels of norepinephrine. Hence raised serum norepinephrine and urinary normetanephrine and norepinephrine are markers of sympathetic nervous activity. There is now evidence that some subjects with normal or high plasma renin levels have increased serum norepinephrine and urinary catecholamine levels, while some subjects with low plasma renin activity have reduced serum catecholamines.

Another approach to the evaluation of sympathetic function has been through measuring serum and urinary cyclic AMP. Although it is uncertain how exactly urinary cyclic AMP excretion reflects beta adrenergic activity, they are known to be correlated. In the upright posture cyclic AMP excretion is abnormally raised in patients with borderline hypertension. Furthermore the plasma cyclic AMP response to insulin-induced hypoglycemia is increased in high-renin essential hypertensive subjects but reduced in subjects with low plasma renin activities.

High-renin essential hypertensive patients lower their pressures in response to lower doses of propranolol better than do subjects with low-renin activities. In addition, the same therapeutic spectrum has been documented with the alpha-blocking agents phentolamine and phenoxybenzamine. The differential response to these drugs shown by these patient subgroups is perhaps the strongest evidence to date that high-renin essential hypertensive patients have excess sympathetic nervous function.

Studies indicate tyramine, which raised blood pressure indirectly by displacing norepinephrine from the nerve ending, produces a greater pressor response in high-renin than in low-renin essential hypertensive subjects. Since the pressor response to norepinephrine is similar in both groups, the

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differential tyramine response is interpreted to mean that stores of releasable norepinephrine are greater in high-renin than in low-renin subjects.

Finally there are suggestions that some patients with high-renin essential hypertension have certain psychological characteristics such as suppressed hostility which may or may not be reflected in sympathetic nervous function. Elucidation of the psychological components in hypertension, which have so long been suspected by the lay public, must await more definitive psychometric testing.

The therapeutic implications of the accumulating data on sympathetic function and hypertension are readily apparent. While the diuretics remain the first line drugs in low-renin essential hypertensive subjects, propranolol or another drug acting through the sympathetic nervous system would appear to be more effective in the patient with high-renin essential hypertension.

X-Ray of the Month . . .

Continued from page 500

portion of the abdomen. This type of pulmonary sequestration then differs from the intralobar type in that it has its own pleural sheath and is located outside the lung parenchyma.

The blood supply to both the intralobar and extralobar sequestered segment can arise from the thoracic or the abdominal aorta. The patient presented here had three arteries supplying the sequestration. Figure 2 shows a selective angiogram of the main feeding artery supplying the lesion.

The roentgen procedures used in the diagnosis of these lesions consist of (1) plain film views of the chest, (2) tomography, (3) bronchography, and (4) thoracic and abdominal aortography. The plain film examination of the chest will either show the lesion to be a solid mass or a cystic air-filled density, usually located in the

VOLUME AND ADRENERGIC PARAMETERS IN ESSENTIAL HYPERTENSION

Characteristic of Hypertension	Low-Renin Patients	High-Renin Patients
Plasma renin activity (definition)	↓	↑
Propranolol-responsive	+	+++
Phenoxybenzamine-responsive	+	+++
Phentolamine-responsive	+	+++
Serum norepinephrine	N or ↓	N or ↑
Diuretic responsive	+++	+
Pressor response to tyramine	+	++
Pressor response to norepinephrine	+++	+++

base of the lung. Bronchography will show that the bronchi of the surrounding normal lung do not communicate with the sequestered pulmonary segment. Thoracic and abdominal aortography will establish the diagnosis by demonstrating one or more anomalous arteries arising from the aorta and supplying the sequestered segment.

Aortography is also valuable in delineating the arterial blood supply to the sequestered segments before surgery is performed so that the anomalous vessels may be more easily identified and ligated during the surgical procedure.

Pulmonary sequestration is not uncommon, and with today's radiographic procedures, a diagnosis is suggested and confirmed with regularity.

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ANSWER:

Pulmonary sequestration

U.T. Grand Rounds . . .

Continued from page 495

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Is Lobular Carcinoma Of Breast Always Estrogen Dependent?

JOSEPH J. SANNELLA, M.D.

Determination of estrogen-binding receptor should now be routine in every breast cancer removed. Receptor negative cases rarely respond to endocrine therapy but regression can be expected in approximately 65% of those with receptors. The therapist can be guided by the results of estrogen receptor assay (ERA) should metastatic disease develop at a later date.

There are many patients who have not had ERA performed on their primary tumor. It is entirely possible that a metastatic lesion might appear which is either too small for accurate analysis or relatively inaccessible to removal. In such cases, if the primary tumor had histological characteristics of lobular carcinoma, endocrine therapy would seem to be indicated since greater than 90% of lobular carcinomas are positive for estrogen receptors. This recommendation is based on the two sets of data presented in the Table. The paper by Rosen, et al¹ prompted an examination of our own series.

ERA POSITIVITY (%)

	Rosen's Series (333 cases)	Author's Series (89 cases)
All breast cancers	54.4	54.7
Duct cell carcinoma	54.7	54.2
Lobular carcinoma	92.3	100
Medullary	25	50
Colloid	40	-
Tubular	0	50
Mixed ductal & lobular	-	50

The two series are comparable in several respects. Both studies use the dextran-charcoal Scatchard plot method for assaying estrogen receptors. The incidence of pure lobular carcinoma is about the same. This probably means that the histologic criteria applied are at least similar. The percent positivity in ductal carcinomas is almost identical. The differences noted in medullary, colloid and tubular carcinomas undoubtedly result from the small number of cases involved in both series.

In our material, 15 cases were either recurrent or metastatic breast lesions. The ERA positivity in this group was 46.7%. This is less than the rate (56.3%) in primary lesions and parallels the experience of Savlov, et al.² It appears that metastases may lose estrogen receptor. No case has been reported where a metastatic lesion acquires estrogen receptors.

Researchers are examining other characteristics of breast cancer that may further improve therapy of metastatic disease. Progesterone receptor assays will soon become as standard a tool as ERA. Additionally, enzyme profiles on the cancer tissue seem to indicate that a good response to present modes of combination chemotherapy can be expected if the tissue is rich in glycolytic enzymes such as lactic dehydrogenase, isocitrate dehydrogenase, glucose phosphate isomerase, glucose-6-phosphate dehydrogenase and 6-phosphogluconate dehydrogenase.

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A Departmental Report To the President's Commission on Mental Health

Over the past several years, increased public awareness on the plight of Tennessee's mentally ill and mentally retarded and the generosity of legislatures and administrations have enabled the Department of Mental Health and Mental Retardation (DMHMR) to make significant progress in the development of resources.

Nevertheless, many gaps in the service delivery systems have been identified. Some are caused by a deficiency of funds, and others by federal guidelines which are too strict to permit flexibility in their implementation.

On May 25, 1977, Mrs. Rosalynn Carter and the President's Commission on Mental Health held public hearings in Nashville. The following is a summation of remarks presented to that group by DMHMR Commissioner Harold W. Jordan, M.D. Also included are proposals as set forth in various position papers provided to the Commission.

Mental Health

The Community Mental Health Center Act (Public Law 94-63) requires that Tennessee implement a program of deinstitutionalization. We need federal assistance if we are to develop alternative resources and recruit additional manpower to staff new programs. Transitional halfway houses, quality assurance programs, pre-screening, and aftercare are all essential if our large institutions are to be reduced to the desired census.

Recent federal emphasis on depopulation has had many positive effects. It has also created problems for the individuals involved, for the state, and for the community. There are not enough community resources—especially live-in resources—at present to meet the needs of individuals in transit from the institution to the community.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

One group of citizens especially affected by deinstitutionalization are the elderly. If the Geriatric Services Section of DMHMR is to develop comprehensive services additional funding will be required. We have many elderly citizens who are suffering from emotional insecurity, loneliness, and neglect.

Progress has been made in gaining public awareness and in planning mental health needs of the elderly at the community level, but additional funding could enable us to effect the quality of care which should be the right of all.

The issue of living environments is particularly distressing. In Tennessee, over 6,500 elderly people now reside in a variety of unlicensed facilities—halfway homes, boarding homes, and foster homes. There is a tremendous need for licensure legislation for these supportive shelter facilities.

Special community programs for adolescents are too few. We do not have sufficient funds to develop the necessary support facilities for young men and women with mental problems. Many do not require complete institutionalization but cannot be maintained in their homes.

The problem of identification of preschool children with developmental problems is one of much importance. DMHMR requests additional support in order that these young children can be identified and placed in suitable treatment programs.

Abuse of alcohol and other drugs affects more people in the United States than any other mental health problem. We need more research into the causes and means of preventing alcoholism and other drug abuse so that our professionals and paraprofessionals will be better equipped to treat the patient and reduce the incidence rate.

The forensic group is a special patient category. Financial support is required if we are to develop new and better treatment techniques in the area of legal and clinical forensic issues.

Mental Retardation

The mental retardation field has traditionally been influenced by trends in mental health. This has not always been good. The mental health model often prevented our retarded citizens from receiving appropriate training on a developmental model.

We know the mentally retarded often require a lifetime support system which is different from the short-term system designed for the mentally ill. We therefore submit a request that the President's Commission pay particular attention to the unique needs of the mentally retarded. We also hope they will define the responsibilities and alignments between the President's Commission on Mental Health and the President's Commission on Mental Retardation.

At present, a considerable sum of federal Medicaid dollars is being allocated for the purpose of maintaining large public and private institutions for the mentally retarded. In Tennessee, we are concerned that a state institutional system which becomes dependent on such funds finds it difficult to transfer those persons who are capable of functioning in a community residential facility to the community.

We propose that a new federal program be developed to provide community-based residential services including group homes, sheltered apartment programs, etc. We feel that such a program, if administered appropriately, will be more cost efficient and will provide better services to more people without necessarily increasing funding levels.

There are many individuals in residence in our ICF/MR facilities who do not require that level of care. Many could and should be served in smaller, less sophisticated programs which can provide appropriate habilitative services through challenge-oriented community-based programming.

In providing community-based residential alternatives to institutionalization, most states

have experienced considerable difficulty with regard to the fire safety issue. Since it is the inherent goal of community-based programs to provide the most normal, home-like residence possible, it is unreasonable to expect such facilities to meet the same expensive construction requirements that large institutions must meet.

Obviously, the most severely handicapped, or multiply handicapped, who are incapable of self-preservation require the safest environment possible. However, most developmentally disabled individuals possess varying degrees of self-preservation capabilities and should not be denied the challenges of community living.

We suggest that the National Fire Protection Association add to the life safety code several categories under the "resident occupancies" section that deal specifically with special congregate living situations for the developmentally disabled.

The enactment of the Housing Act of 1974 brought great hope to those of us interested in providing housing for the mentally retarded in Tennessee. Its language spoke of congregate housing, 202 financing, rent supplements for existing housing, and other programs which could benefit the developmentally disabled.

Unfortunately, these good feelings didn't last, for we soon realized that implementation of the law would take a long time. We soon learned that there is not sufficient expertise in the area of residential services for the developmentally disabled. The legislation seemed applicable only to the mildly handicapped. We recommend the establishment of housing programs specifically for the developmentally disabled rather than trying to modify existing programs.

We also recommend that a division be created within the Department of Housing and Urban Development which will have more knowledge about residential programs for the developmentally disabled. Such a division can work with state agencies in developing and implementing a state housing plan.



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COST — Continued

Last month I wrote about the “rapid rising cost of health care.” Now I want to mention the cost item that has been the most rapidly rising cost of all for almost every citizen, taxpayer, i.e., the increased cost of government. It is difficult for us to comprehend the astronomical figures that are used in talking about government spending (how much is just \$1 billion?), but we are acutely aware of continually rising amounts that we are required to pay in taxes.

Rarely can we as citizens completely redirect our government or even turn its course significantly, but we do have that opportunity in Tennessee this year in the constitutional convention. I believe that the delegates to the 1977 constitutional convention can and should draft a constitutional amendment to limit government spending in Tennessee.

In a representative government, we recognize that in the process of governing, all majorities are but groups of minorities temporarily banded together to support the other's interest and to receive a similar support for its interest.

It seems that all interests basically devolve to the proposition of “more money” and government has become a tool for facilitating transfers from those who “have” to those who “want” in the blind mistaken belief that such action is the way to improve the lot of those who “want.” Transfers never have and never will achieve lasting improvement in individual citizen status, for such action is merely slicing the pie differently rather than creating a larger pie. Government's proper role should be to encourage a climate in which a bigger pie can be created and in which all are assured equal economic opportunity, rather than guaranteeing benefits for some.

We Tennesseans believe in representative government, but we also believe that we have the inalienable constitutional right to instruct our representatives in all matters—including the level of taxes imposed on us. A constitutional amendment to limit government spending in Tennessee should include several basic elements:

- (1) Government spending should rise no faster than does the citizens' prosperity.
- (2) Provisions should be made for controlled exceptions and flexibility so as not to interfere with the provision of necessary services.
- (3) It should address no specific tax, but rather should state that government's share of the citizens' prosperity shall be fixed at a reasonable level.

I encourage you to support such an amendment to the Tennessee Constitution; to ask others to join the effort, and to personally contact your delegate to the convention, urging his support.

If successful in the convention in 1977, you can have on your ballot in 1978, for your approval, an amendment to limit spending and thereby limit taxes in Tennessee. We could then hope that this progressive idea might catch on in other states and eventually be carried on to the federal level.

The Tennessee Constitution declares “all power is inherent in the people”; it is now your prerogative to exercise that power.

Sincerely,

David H. Turner, M.D.

PRESIDENT

**president's
page**

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JULY, 1977

The first anniversary of that signing was a jubilant day. Things were happening. A month earlier the Stars and Stripes were born in Congress, and during the summer four famous European officers would enter during its service, the Marquis de Lafayette of France, Baron Johann de Kalb and Baron Friedrich Wilhelm von Steuben of Germany, and Thaddeus Kosciuszko of Poland. The fall of the year would see Lord Howe occupy Philadelphia, but General Burgoyne would outrun his supply line and would surrender at Saratoga, New York, a real shot in the arm for the young Continental Army. Articles of Confederation would be signed in the Congress on November 15, though they would not be finally ratified by the individual states until 1781. The winter would see France recognize our independence and she would enter into a Franco-American alliance, even as Washington's shrinking army languished at Valley Forge, desperately short of food, clothing, and military supplies. The war at sea was even more successful. John Paul Jones took the war to the British Isles, and the French fleet forced the British to evacuate Philadelphia.

Five long years of war lay ahead on July 4, 1777, and it was at great cost to our forebears that independence was won and has been sustained for two centuries. Inroads have been made into that independence over the years, starting almost as soon as our nation was born. Most of the breaches healed with time, but the question we must continually ask ourselves is, "How good is our stewardship of our costly heritage?"

Major incursions are being made almost daily into our individual and corporate freedom. Perhaps some are necessary. Certainly the satisfaction of our every whim is not a part of freedom, as responsibility, to which true freedom must be firmly linked, requires a bridling of desires, without which license and not liberty reigns. But for nearly the entire half-century just past, the federal government has been fiddling with economic controls, as with the aid of a very liberal Supreme Court it has slowly rewritten much of the Constitution, and has arrogated to itself functions which the Constitution's designers considered properly left to the several states.

We carry elsewhere in this JOURNAL what I consider to be a proper statement for this particular issue. Entitled the "Sharon Statement," it was drafted in 1960 by the Young Americans for Freedom. It is primarily a free-market docu-

editorials

Independence Forever!

On July 4, 1826, as our country was wildly celebrating the 50th anniversary of the signing of the Declaration of Independence, Thomas Jefferson, 83, and John Adams, almost 91, quietly died within four hours of each other. Shortly before his death Adams was asked for a toast for the day, to which the old Yankee whispered, in what were almost his last intelligible words, "Independence forever!"

ment, which in this era of Keynesian philosophy is in some disrepute, and with which some of you may have a measure of quarrel, though in fact free market economists are gaining in stature—barely. But it is the last four statements which I wish presently to examine in some detail.

We will be free only so long as the national sovereignty of the United States is secure; history shows periods of freedom are rare, and can exist only when free citizens concertedly defend their rights against all enemies;

In the name of freedom of speech, freedom of the press, and civil liberty, national security has been severely weakened in the wake of Watergate. It is undoubtedly true that police powers, at both federal and local levels, have been abused, but this is neither new nor is it confined to this nation. There have been sufficient checks in the past to insure against a police state, but these checks have now been exercised to the point that our police system is being rendered progressively less effective as federal agents and local police become first frustrated in the pursuit of their duties, and finally demoralized. A recent *Time* article indicated the Mafia and the underworld generally are ranging virtually unchecked because of the compromising of necessary police powers of investigation and law enforcement. In our zeal to protect our freedom from police incursions we are surrendering it to the Mob. Is it a fair trade? Does it serve our national sovereignty if foreign agents can operate unhindered?

The forces of International Communism are, at present, the greatest single threat to these liberties;

Those who understand this best are those who have lived or who still live as dissidents in a repressive society. There no liberty exists. There is no freedom of speech, as witness the ample evidence of writers Alexander Solzhenitsyn and Andrei Amalrik, astrophysicist Kronid Lyubarsky, nuclear physicist Andrei Sakharov, and many others. There is no freedom of movement except for those high in the party. Fear is everywhere.

What is good for the Soviet citizens is good for the world. That was the message of Marx and Lenin. The revolution is exportable—witness Cuba, Angola, and now Italy, Zaire. Soon the world. It is their one aim.

The United States should stress victory over, rather than coexistence with, this menace.

Marxism demands the violent overthrow of all governments which are not populist, and that means anarchy. Even the tyrannical, despotic,

cruel, repressive socialist regimes of the so-called communist countries are considered simply a temporary pragmatic means to the end of pure communism. There are many who consider the communist line to have softened, but periodically one of the Soviet or Chinese leaders makes a statement which clearly reveals their intent, which is to “bury us.” It is inconceivable to men like Solzhenitsyn and Sakharov that we can be taken in by the words of men who consider lying in the service of communism a virtue. While it may be necessary to coexist temporarily, it must be the coexistence of a mongoose with a rattlesnake. Coexistence cannot be peaceful.

I am not rattling a sabre, nor am I even suggesting military conflict as any solution at all. What I am suggesting is that “detente” is a dangerous game when one of the players is totally amoral and dedicated to deceit and, despite disclaimers, to the destruction of the other. The only help must come from freedom seekers within, which is difficult when dissidents are systematically removed from the system, by either death or exile. I am further suggesting that no solution at all is within our power except as we aid those within the system who are attempting to change it, the professed and publicized lack of concern for them on the part of our ambassador to the United Nations notwithstanding. In our cowardice we have since the Bay of Pigs refused to give them aid and comfort, bowing to the accusations of the Soviets that we are interfering in their internal affairs—as if they did not daily interfere in ours. We cannot play any role at all in their lives from a position of weakness. Perhaps all the talk of human rights is after all only rhetoric.

American foreign policy must be judged by this criterion: does it serve the just interests of the United States?

On the face of it this might be judged the epitome of chauvinistic parochialism, and yet it just might be the most important statement of the document, not only for ourselves but for all lovers of freedom over the world. The *just* interests of the United States are that all the peoples of the world be free.

In spite of our faults, statements from individuals in many countries indicate that they and theirs look to the United States of America as the last bastion of freedom in the world. They feel if freedom in this country fails, there is truly

no hope. That is a great compliment, but it is also a dreadful responsibility.

Alexander Solzhenitsyn said, "We are slaves from birth. We are born slaves. I am not young anymore, and I myself was born a slave; this is even more true of those who are younger. We are slaves, but we are striving for freedom. You, however, were born free. If so, then why do you help our slave owners?"

God forbid that the struggle for freedom from all sorts of bondage ever cease, in the Soviet Union, in China, or anywhere else where oppression exists, even, sadly, in our own country. We were born free at great cost. Should we then hold our freedom lightly?

Most of all, should we help those who enslave others? Short term, it may seem in our national interest to do so. Long term, it bears in it the seeds of our own destruction.

It cannot be said better than by that dying old Yankee from Massachusetts, "Independence forever!"

And not just for ourselves.

J.B.T.

On Making the Scene

The American Medical Association has become a multi-million dollar corporation with 175,000 members and nearly 200 professional and lay employees, the chief executive officer (CEO) of which is the executive vice-president (EVP). The problems of the CEO are legion, as he is charged by the Board of Trustees with assembling the proper expertise both to defend American medicine against incursions from external sources, such as big government, labor, business, and what have you, and to provide a proper climate for the practice of medicine at its best. This takes a lot of doing.

If there is a single voice of American medicine, it is that of Jim Sammons, the executive vice-president. He accedes to the position, however, only because he has the responsibility of being the funnel into which all the information, internal and external, is poured. But because of the complexities of the problems facing medicine, no single individual can speak authoritatively on every subject, so councils and staff have been assembled to provide that expertise. Staff is answerable to the EVP, who is answerable to the Board, and who in turn is answerable to the House of Delegates, which consists of your representatives.

Having said all this by way of explanation, I wish to say that it in no way detracts from the honor and glory of the presidency. Though the EVP, for reasons which I hope you appreciate, may be the voice of American medicine, the president, by virtue of his election by the House of Delegates, is the leader of the majority of the physicians in this country. His job is not easy, and can be thankless. It is his duty to stand as a buffer between his 175,000 constituents and those who are charged with the day to day operation of the Association.

There has been for several years now a move to employ a full-time president. The present House spoke clearly and virtually unanimously that it wished to have its own officers: president, president-elect, and immediate past-president. In lieu of a permanent president, the Association's chief operating officer will continue, at least for the time being, to be known as the EVP.

Tennessee has just been honored by the election of Tom Nesbitt as president-elect of the AMA. If all goes well, he will on his inauguration become the eighth Tennessee physician to hold this office.

I think you need to know the esteem in which Tom is held by the House, which he has served as a most effective speaker for the past five years. Such was his popularity and unassailable position that he ran unopposed. The nominating speech (carried under Medical News in Tennessee) by Dr. John Burkhart of Knoxville, chairman of the Tennessee Delegation, was greeted by a standing ovation of the House. Seconding speeches, which are limited by House action to simple expressions of support, came from every delegation, and the announcement that he was elected by unanimous ballot was greeted by a second standing ovation. At his presentation of his lovely family, the House and gallery rose a third time.

Upon his inauguration as 133rd president of the American Medical Association, which will occur in St. Louis on June 21, 1978, Tom will receive in these pages the fitting tribute which to publish now would make that event an anticlimax. For now, the editor joins every physician and staff member of the TMA in congratulating Tom, in wishing him every continued success, and in breathing a prayer for his continued well-being, along with that of his family, and for ourselves, his supporters and constituents, as we face a rapidly changing society.

J.B.T.

Ballad of East and West: Reprise

We're always talking about our honor and our American way of doing things, and we have never kept a single promise or a single treaty we ever made with the Indians. We make him a treaty and say, this land is yours now as long as the grass shall grow and the waters shall flow. Then a white man comes and says, look, that whole country over there, that's too good to let those damn Indians have. Our treatment of the Indian has been one of the greatest scandals that's ever been known.

Col. Tim McCoy

Somewhere between 50 thousand and 2 million years ago man appeared on this planet, the exact time depending mostly on what one likes to consider his forebears. This also affects the geographic location, whether in Africa or the Middle East. It is likely the particular ancestors of most of us spread westward over Europe from the Indus Valley in waves beginning in about the third millenium BC. By about 800 BC the Celts inhabited most of Mid-Europe, having displaced earlier inhabitants, but they themselves were pushed finally to the far corners of the British Isles, first by the Romans and then by the Saxons, who were in turn either destroyed, pushed out, or partially absorbed by the Huns and the Normans, respectively. Indo-European man has been constantly pushing westward, scouting for new territory.

The land mass of our planet appears originally to have existed as a single continent, which for various reasons split apart, and the fragments have been moving away from each other at the rate of a few centimeters a year for the past few hundred million years or so. Sometime before Asia and North America finally separated, probably about 15,000 years ago, men who shared a common ancestry with the Mongols came across the land bridge where the Bering Straits now are, and began populating the Western Hemisphere. New infusions ceased when the continents separated, but the movement to the south and east continued. There are indications that man was in Tennessee as much as 11,000 years ago. Wave after wave pushed out, overran, or destroyed the previous ones. It was inevitable that as soon as man conquered the oceans the eastward and westward movements should meet. Man being what he is, and considering his previous history, that meeting would predictably not be peaceful. It wasn't.

"In fourteen hundred and ninety-two Columbus

sailed the ocean blue." Although the Phoenicians circumnavigated the globe (and incidentally originated the fiction that the world is flat, in order to protect their trade routes), and the Vikings apparently reached our northern coast from Greenland as early as AD 800, they had little or no impact on history in this hemisphere, and the coming of Columbus initiated the clash between East and West.

Though it is unclear whether Columbus was searching for new lands or for a trade route to Asia, he steadfastly maintained until his death that he had sailed along the coast of Asia, and that the islands he had discovered were the Indies. He called the inhabitants Indians, and Indians they still are.

A succession of adventurers, fortune hunters, explorers, churchmen and blackguards, first from Spain and later from England and France, flooded into this new world, doing what men of similar calling had been doing not only for centuries but for millenia. They fought, killed, and stole from the Indians, but they were not exclusive in their warfare, as they did the same to each other. Their feelings about the Indians were mixed. The more sensitive among them were overcome by the beauty and magnificence of the cities of Mexico and the areas to the south, but they were equally revolted by the extent and barbarity of human sacrifice in their religious observances. Being products of the Inquisition, the Spaniard could conclude only that the Indians were less than human, and could be killed with impunity. Only a few voices were raised in opposition, and they went unheeded, or indeed unheard.

From the first, Indian leaders were taken to Europe by various of the explorers, where they were entertained first as curiosities and later as the nobility that in spite of the rough edges they demonstrated themselves to be. A lot of period writing, both in England and on the European continent, concerns itself with the "noble savage," and the colonists were often roundly criticized for their treatment of the Indians. Relationships, though, were in fact generally pretty good between the white invaders and the Indians away from the leading edge of civilization. White scouts lived peaceably among the Indians, and whole Indian villages and tribes existed peaceably within the colonies—until they began to get in the way of the westward push. A good local example

—and there are many others—are the Cherokees, who were dispossessed and evicted from Georgia because their white neighbors wanted—and laid claim to—their land. The resulting “Trail of Tears” to Oklahoma is a familiar sad story. Another is the “Long March” of the Navajos in 1864. They were a reenactment of a drama which had occurred repeatedly since the coming of man. This is not to excuse it, but only to observe that the veneer of civilization is thin indeed.

“The Great White Father in Washington spoke with forked tongue” over and over, pushing the Indians westward onto smaller and smaller reservations. A paternalistic relationship developed, in which the Indian, no longer required to make his own way, and indeed often if not usually deprived of the means for doing so, treated as a “child of nature,” and even considered incapable of doing for himself, began to dissolve in alcohol and disease. Those who would and could escaped into the white man’s world. Many refused to take that route, and others were refused the opportunity.

One of the responsibilities which the Great White Father (Big Brother?) assumed was health care of the Indian. His record in fulfilling that obligation has not been creditable. As early as 1789 the new government began to concern itself with the health of the Indians, but this consisted largely of vaccination against smallpox of tribes situated near military installations. In 1832 a Bureau of Indian Affairs was created in the War Department for that purpose. Early treaties, beginning in that same year, sometimes made mention of medical services, but after the Bureau was transferred to the Department of the Interior in 1849, all treaties contained a promise of medical care. This resulted in the formation of a corps of civilian employees, and by 1900 there were 83 full-time physicians in the Bureau’s Indian Medical Service. Federal construction of hospitals and infirmaries began in the 1880s, but it was not until 1911 that funds were specifically designated for that purpose.

In 1926 the U.S. Public Health Service began detailing commissioned medical personnel to certain positions in the Bureau because of increasing dissatisfaction over the Bureau’s handling of the health program, especially the failure of their facilities to meet minimum acceptable standards and failure to provide financing for salaries ade-

quate for sufficient personnel. Suggestions were made as early as 1919 that this program be transferred to the Public Health Service. The movement was revived in the 1930s, and the transfer was finally accomplished by legislation enacted in 1955.

Indian Health Service care is limited to Indians living on or near reservations and in Alaska, where it includes Eskimos and Aleuts. It involves some 490,000 out of the 827,000 individuals who in the 1970 census identified themselves as belonging to one of those groups. Most of the approximately 260 Indian tribes in the United States live west of the Mississippi, for the most part scattered throughout geographically remote areas which are often almost inaccessible because of lack of roads, rough terrain, and harsh climate. They have largely retained their tribal identity, customs, and beliefs and are often both physically and socially isolated from other tribes and from American society in general, resulting in a standard of living at the poverty level, with substandard housing, sanitation, and general resources.

The failure of the Indian Health Service to meet the health needs of the Indians is traceable not to a lack of devotion on the part of the medical officers who have served there so much as to the vastness of the areas, which are often thinly populated by peoples speaking a variety of languages, with varied beliefs and customs, served with inadequate facilities, which are the result of half-hearted financial commitment by the agency. This lack is traceable directly to the Congress and has to derive from the relatively weak political clout enjoyed by the Indians. This is in no small part due to the fact that “Indians” are no more homogeneous as a group than are “Caucasians.” The various tribes were at war for centuries before the coming of the white man, and until very recently have considered each other as just as much an enemy.

Two years ago a graduate of Vanderbilt Medical School, at the completion of a year of residency in internal medicine, joined the Indian Health Service and was assigned to the hospital at Shiprock, New Mexico, near the eastern edge of the Navajo reservation. I asked him to write an article for the JOURNAL about what he found there. It appears in this issue, with the approval of the Navajo Tribal Council, and besides being fascinating reading, its message merits your attention.

Indian health has improved a great deal since the foundation of the IHS in 1955, but it still has a long way to go. It shares the problems of rural medicine generally, but has also some problems peculiar to itself, among which are lack of education, lack of communication, and dependence on tribal customs and traditions. Alcoholism is a severe problem, and thus far treatment has concerned itself largely with the acute phase only. Tribal medicine men often work in concert with Anglo physicians, being particularly valuable allies in mental health, and serve as a stabilizing influence in Indian culture, an advantage Indians have over other disadvantaged groups.

In spite of improvements under the Public Health Service, and in contrast to the relatively good conditions in the Navajo nation, more than half of the health care facilities among the Indians generally are still woefully inadequate and fail to meet Joint Commission minimum standard. Moreover, staffing ratios of health care personnel to population on reservations is extremely low as compared to the national ratio.

It is hard for us to accept the fact that we have a "third world" within our own borders, because with acceptance comes the responsibility for action. It is true the Navajo nation is far from us, but the Southeastern tribes, which have recently banded together to fight bureaucracy and to fight for rights guaranteed them by solemn treaty, share some of the same problems. Though the distances are not as great, many of them are as isolated as their Navajo cousins. Poverty is a general problem, as is substandard housing. Isolation can for various reasons occur even in the most crowded conditions, and indeed an AMA survey indicates that the needs of non-reservation Indians are often much greater than those on reservations, because they tend to live in urban slums or on small, poor "rancheros."

The AMA has had a well-documented and long-standing interest in Indian health and over the years has made many recommendations, which have largely not been followed because of lack of funding by the Congress. In 1973 the AMA Council on Medical Services made, among others, the following recommendations (abridged):

1. That Indians be recognized as full-fledged citizens of the United States, with all the rights and privileges pertaining thereto;
2. That federal, state and local governments give attention to the health care needs of the Indians, with adequate federal monetary support;

3. That Indian cultural and religious beliefs be respected and that the medicine man be recognized by the AMA as an integral and culturally necessary individual in delivering health care to Indians;

4. That the AMA and state and local medical societies establish liaison with Indian professional groups and tribal councils, and that they

5. Recommend programs for recruitment and training of Indians in health careers at all levels, and urge their expansion;

6. That the AMA support inclusion of Indians in established medical training programs in numbers sufficient to meet their needs;

7. That the AMA utilize its resources to create a better awareness among physicians and other health providers of the special problems and needs of Indians and that emphasis be placed on the need for additional health professionals to work among the Indians; and

8. That the AMA support the concept of Indian self-determination as the strength of successful Indian programs.

When Caesar, after a long and bitter siege, finally conquered the starving massed Celtic armies of Gaul under Vercingetorix, he took their leader in chains to Rome, imprisoned him, and after six years had him strangled. Gaul became Roman. The citizens of the villages adopted Roman dress, Roman names, and Roman customs, and shaped the language into French. Life went on in the villages pretty much as it always had. They were essentially a rural people, and derived their livelihood from the soil. Rome brought a higher technology, more permanence of buildings, and their ways of life melded together to form the French. The same process occurred as the Saxons, Romans, and Normans became the English.

In the other direction, the Tartars, Mongols and others rode into China, and were absorbed. It became well known that everything entering China ultimately became Chinese.

East is east and West is west. It was relatively easy for Western peoples to take on new Western cultures, and for Eastern cultures to absorb others. But Kipling knew whereof he spoke about the meeting of East and West. Going to the east, Alexander, the Crusaders, Britain, and most recently the Soviet Union knocked heads with the East, and mostly came out second best, because the East, like the ameba, simply encircles and digests what comes in. Even the vaunted British Empire ultimately crumbled.

If the Indians had not already decimated each other by internecine warfare prior to the coming of the white man, the story might have been quite different. But the highly technological and organized "civilized" West met a disorganized, "uncivilized," nearly stone age East, and overwhelmed it. Because we were civilized, the Great White Father promised to take care of the Indian for "as long as the rivers run and the grass is green" in exchange for his lands.

Talk is cheap, as the Indian found to his sorrow, and treaties are made to be broken. In addition to losing his land, he was robbed by paternalism of his initiative and his opportunity.

We do not need to engage in handwringing remorse nor to feel impelled to bear the guilt of our forebears, as some of our bleeding hearts are wont to do. We obviously cannot return the land to the Indians, though we must not on the other hand commit further rape. What we can do is to return to them their dignity and their self-respect. Restored opportunity will restore initiative. It is not the most we can do. It is the least.

J.B.T.

Atlas Shrugged

A number of years ago Ayn Rand wrote a book which she entitled *Atlas Shrugged* to suggest that like the book's main characters, Atlas no longer found the world worth supporting, so he simply dumped it off his shoulders. Although its philosophy is often questionable, and though its ending is rather contrived, it is a most fascinating book, and I must confess that, having just read a news item on "child pornography," Ms. Rand's thesis has a lot to recommend it.

A Civil Liberties Union attorney commented that of course those who sexually exploit children in violation of the law should be prosecuted, but that (also "of course") those who publish the products of that exploitation must be protected from prosecution under the First Amendment's provision for freedom of speech and freedom of the press inasmuch as "they have violated no law." If they haven't, they should have.

Miss Anita Bryant, once runner-up for the title of "Miss America" and now a popular singer and a Miami housewife and mother, is currently being vilified by various and sundry, among them "activist actress" Jane Fonda, of Viet Cong fame, who says Miss Bryant is "not well" and is "fanning the flames of fear" in attempting to

protect the children of Miami from open exposure to and exploitation by homosexuals. Miss Bryant, says Miss Fonda, "represents a kind of mentality which should have been swept away by the civil rights movement." Having been freed by the civil rights movement from the fear of being jailed for their deviant sexual practices, homosexual activists now feel threatened because they cannot flaunt their practices and recruit children, through the schools and youth organizations, into their ranks.

The newspaper item following the one reporting Miss Fonda's outburst was a report of a national poll of 1,000 youngsters, grades one through 12, as to who they would most like to be. The winner among the girls was Farrah Fawcett-Majors, whose fame derives to no small extent from her nipples, publicly displayed on several million large posters worldwide. The boys' first choice was Lee Majors, Ms. Fawcett-Majors' husband, because, as one sixth grader put it, "I'd sure like to come home to her every night." (So *there*, Jane Fonda.)

Does anyone get the idea our society is sexually oriented? And why do you think Adam ate the apple in the first place? *He* didn't pick it.

Sex is one thing. Exploitation of sex is another, and has always gone on. But it is picking up speed in this country. In San Francisco you can buy pornography on any street corner from newspaper racks. Sir Rupert Murdoch, Australian publisher and entrepreneur and now owner of many U.S. newspapers, has made many a defunct rag into a profitable one by publishing nudes on page 3. The publisher of the *Nashville Banner* says Nashville is not ready for that (yet), but a letter to the editor in the same edition decried the fact that Nashville's reading and viewing material is being bowdlerized and suppressed, so it may be only a matter of time.

Sex is one thing, and exploitation of sex is another. But deviant sex and its exploitation are something else again. I concede that what goes on between consenting adults behind closed doors is nobody else's business as long as it affects nobody else. In answer to those who will say (and have said) that homosexuality is not deviant but a variation of the norm I shall only say it *is* deviant, and their saying it is *not* does not in fact mean it *is* not. It is not normal and it never has been normal, in any society of man or any lower order.

A noted columnist said he had previously refrained from writing on this controversial subject because though his feelings were dead set against homosexuality, his reason told him homosexuals should have equal rights, (including the right to adopt children?). Those "feelings" were once called *conscience*, which was *good*, before they came to be ignored as *inhibitions*, which are *bad*. He said he was not much good at quoting the Bible, but he liked the part about doing unto others. That passage must be taken totally out of context to understand it to mean everyone should be allowed to do everything he wishes, for in fact the Bible says, "There is a way which seemeth right to a man, the end whereof is death."

I am aware that there are those even in the church who say the sin of Sodom (for which the deviation was named) was not homosexuality but lack of charity (which the Bible does in fact say was a sin of Sodom. But it had that in common with a lot of other cities which were around then and which are still around to this day.) But then if the church is to ordain homosexuals into the gospel ministry, as some already have, it must explain away Sodom's sodomy. The Bible's account in Genesis 18-19 is right explicit, though, and explaining it away takes some doing.

The homosexual activists claim their defeat in Miami to be simply a brief setback, as the issue has served to unite the homosexual community worldwide, and bring them out into the open. They say ultimate victory is assured. Perhaps so. Certainly it has been only a few years since even the term was taboo.

Maybe society will choke at last on child pornography, though I have no faith in its ability to do so, long term. Today's thrills are tomorrow's boredom, and if the adrenalin is to keep flowing, new horizons must always be in view. We have seen it in violence, as TV and the movies become progressively more gory. We are seeing it in sex. The limit is what the law allows, and the law will ultimately allow whatever society demands. Society is falling apart; but what we are really seeing is only symptomatic of a world without God.

God shrugged, and only Noah and his family survived. That's once. He shrugged again, and out of all Sodom and Gomorrah only Lot and his daughters made it. That's twice. And then . . .

J.B.T.



Abortions in Tennessee

To the Editor:

I write to call attention to two important aspects of the timely and important article, "Abortions in Tennessee—1975" by Alan R. Hinman, M.D.

Tennessee law (TCA 39-301) does not permit third trimester abortions "only to save the *life* of the mother" as stated by Dr. Hinman, but when "necessary to preserve the *life or health* of the mother" (emphasis applied). The Supreme Court in its 1973 decisions on abortion defined "health" in such a broad sense that abortion-on-demand during the third trimester is a legal reality. Indeed, the unborn child is less protected in all the United States than in any nation on earth.

Table 1 in the article indicates that at least 1,751 abortions were performed in 1975 on non-Tennessee residents. Tennessee law (TCA 39-301) clearly states that abortion performed on women not "bona fide" residents of Tennessee will be punishable by a prison term of five to ten years in the penitentiary and by a fine of five thousand dollars.

There is a continuing need for reports such as Dr. Hinman's and I hope that the above noted facts will not "chill" or otherwise deter publication of abortion statistics.

Robert P. N. Shearin, M.D.
Suite 901, 6005 Park Ave.
Memphis, TN 38138

Lippes Loop

To the Editor:

We found "X-ray of the Month" by A. James Gerlock, Jr., M.D., in the April 1977 issue of the *Journal of the Tennessee Medical Association* an interesting presentation of the widened loop sign as presumptive evidence of uterine perforation by a Lippes Loop into the peritoneal cavity. Although this sign provides an important diagnostic lead, the distance between the bulbous tip and the second curve of the device might be misleading in women with a large uterine cavity or in women in early pregnancy with the IUD still in place. Dr. Gerlock does point out that an ultrasonogram or a hysterosalpingogram can confirm the extra-uterine location of an IUD that has perforated the uterus.

In addition to these useful measures other diagnostic procedures have been proposed.^{1,2} For example, if a second IUD of a different configuration is inserted into the uterus, anteroposterior and lateral x-rays of the pelvis will show whether the original IUD is also in the endometrial cavity. Sounding or probing the uterus is less specific than x-rays but may be useful in retrieving IUD tails not visible in

the cervical os. A metal sound can be left in the uterus as a marker while two-dimensional x-rays are taken. Alternatively, a hysteroscope can be used to visualize the endometrial cavity.

Finally, we should also like to point out that the designer of the Lippes Loop is Dr. Jack Lippes, not Lippe as implied by the spelling of "Lippe's loop" in the article and in reference 4.

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Don R. Hornsby, age 65. Died May 31, 1977. Graduate of University of Tennessee School of Medicine. Member of Chattanooga & Hamilton County Medical Society.

Walter W. Robinson, age 82. Died May 17, 1977. Graduate of University of Virginia School of Medicine. Member of Memphis and Shelby County Medical Society.

Frank T. Rogers, age 69. Died May 5, 1977. Graduate of University of Maryland School of Medicine. Member of Knoxville Academy of Medicine.



The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BRADLEY COUNTY MEDICAL SOCIETY

John W. Chambers, M.D., Cleveland
Allan Chastain, M.D., Cleveland
Sandra Elam, M.D., Cleveland
William F. Johnson, M.D., Cleveland
Samuel G. Meredith, Jr., M.D., Cleveland
Clayton Lee Myers, M.D., Cleveland

CHATTANOOGA & HAMILTON COUNTY MEDICAL SOCIETY

Harold E. Messinger, M.D., Collegedale
George C. Vasey, M.D., Rossville, Ga.
Kinsman E. Wright, Jr., M.D., Chattanooga

FRANKLIN COUNTY MEDICAL SOCIETY

Russell J. Leonard, M.D., Sewanee

NASHVILLE ACADEMY OF MEDICINE

John B. Clark, Jr., M.D., Nashville
Richard W. Feldman, M.D., Nashville
James K. Hitchman, M.D., Nashville
Rose Marie Robertson, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

Robert Wyatt Algee, Jr., M.D., Dyersburg

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Timothy D. Gowder, M.D., Oak Ridge
Kenneth F. Luckmann, M.D., Oak Ridge

RUTHERFORD COUNTY MEDICAL SOCIETY

Henry K. Butler, Jr., M.D., Murfreesboro
James W. Garner, Jr., M.D., Murfreesboro
Robert L. Kendall, M.D., Murfreesboro

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Harold A. Sims, M.D., Bristol
Joan T. Williams, M.D., Bristol

SUMNER COUNTY MEDICAL SOCIETY

Jack W. Carey, Jr., M.D., Gallatin
John McNulty, M.D., Portland



The following physicians have been certified as Diplomates of the American Board of Family Practice and were inadvertently omitted from the listing in the May issue of the JOURNAL: *Hobart Beale, M.D.*, Martin; *Boyd Phagan Davidson, M.D.*, Lawrenceburg; *Robert Glenn Dennis, M.D.*, Johnson City; *R. Winn Henderson, M.D.*, Knoxville.

Charles B. Beck, M.D., Madison, has been elected medical staff president of the Nashville Memorial Hospital.

Robert I. Bourne, Jr., M.D., Camden, has received the Silver Beaver Award from the West Tennessee Boy Scout Council in recognition of his being an outstanding supporter of scouting in that community.

Winston P. Caine, Jr., M.D., Chattanooga, has been appointed to serve a four-year term on the Chattanooga-Hamilton County Air Pollution Control Board.

Clifton R. Cleaveland, M.D., Chattanooga, has been elected president of the Chattanooga Heart Association. *Robert Myers, M.D.*, Chattanooga, was elected vice-president of the association.

Hector Howard, M.D., Memphis, has been named president of the Tennessee Heart Association for 1977-78. *James H. High, M.D.*, Nashville, has been named president-elect of the association.

T. James Humphreys, M.D., Jackson, has been installed as president of the West Tennessee Heart

Association. *Thomas Ellis, M.D.*, Jackson, was installed as first vice-president of the association.

H. A. Oxman, M.D., and *R. F. Yatteau, M.D.*, both of Knoxville, were honored at the annual meeting of the Tennessee Heart Association for their efforts at organizing the association's Public Town Meeting, which is held each year to help inform Knoxville citizens of important new advances in the treatment and prevention of heart disease.

J. B. Sams, M.D., Morristown, was elected chief of staff of the Morristown-Hamblen Hospital.

Robert S. Sanders, M.D., Murfreesboro, director of the public health district comprising Rutherford and Winston counties, was named a distinguished alumnus of Castle Heights Military Academy.

Glen C. Shults, M.D., Newport, has been elected chairman of the Newport City Board of Education.

George M. Stevens III, M.D., Oak Ridge, was elected vice-president of the Tennessee State Orthopedic Society.

William Shannon Stoney, M.D., Nashville, was awarded the honorary degree of doctor of science from the University of the South.

medical news in tennessee

Nesbitt Named AMA President-Elect



The American Medical Association has elected Tom E. Nesbitt, M.D., Nashville urologist, as its president-elect for 1977-78. Dr. Nesbitt, who has served as speaker of the AMA's House of Delegates since 1973, was elected at the Association's annual meeting held in San Francisco, June 18-23. He will be installed as the Association's 133rd president June 21, 1978, at the annual meeting to be held in St. Louis.

THE NOMINATING SPEECH OF DR. NESBITT BY JOHN BURKHART, M.D., OF KNOXVILLE, CHAIRMAN OF THE TENNESSEE DELEGA- TION, FOLLOWS:

Mr. Speaker, Members of the House of Delegates, Ladies and Gentlemen:

It is my distinct honor, speaking for the Tennessee Delegation and on behalf of the Tennessee Medical Association, to place before you the nomination of the next president-elect of the American Medical Association. Insofar as I know at this moment this will be the only nomination for that high office which leads automatically to the highest office in American medicine, the office of president of the American Medical Association. This fact in itself is a more eloquent testimony to the qualities, capabilities, and caliber of this physician leader than any I can give. But the dignity, prestige, and demands of the office require some description of the one who is being nominated to fill it.

For five years he has served this House of Delegates as its speaker and has done so with a calm, cool equanimity and patient fairness that has been a pleasure to observe. He has led the House through some of its more difficult times, not always with perfection, but as near to it as it is possible for a perfectionist to be. His duty has been to guide, not to pressure, to assist, not to hinder, to smooth, not to roughen, and this role has been faithfully performed.

In his position as vice-speaker and speaker he has been an ex-officio member of the Board of Trustees, without vote but with the privilege of entering into its deliberations. This he has done with intelligence and candor and he has been an integral voice in the development and shaping of Board decisions. He has expounded the philosophy, policy, and principles of the American Medical Association in many and varied forums, both lay and medical, and has done so with knowledge, conviction, and clarity.

His past experience and present qualities make him the ideal person to follow the next president of the American Medical Association and to take over the reins of leadership a year hence. My only regret in nominating him for this office is that his election to it will break up one of the best speaker-vice-speaker teams this House of Delegates has had since I have been a member of it, some 12 years now. But this is change, and these offices will be filled by capable persons as time moves on, so that it is really with no regret at all but is with elated sense of the privilege which it is that I place before this House the nomination of one who has served American medicine for many years and can and will serve it for many more, one who deserves the trust and faith he has earned and will continue to merit, one who can and will join the parade of distinguished presidents of the American Medical Association. Mr. Speaker, for the office of president-elect I nominate Dr. Tom Nesbitt of Tennessee.

Physicians Who Served As Doctor-of-the-Day—1977

The Doctor-of-the-Day program, sponsored by the Tennessee Medical Association and the Tennessee Hospital Association, affords physicians the opportunity to become more aware of the workings of the legislature while providing treatment to the legislators and their staff. The Doctors-of-the-Day usually serve Tuesday through Thursday during the working session of the General Assembly. The Tennessee Medical Association recognizes the following physicians who served during the first session of the 90th General Assembly.

P. B. Vasuedo Nashville	Mark Judge Oak Ridge
H. P. Whittle Charleston	Jack S. Kaley Erin
Paul Wittke Knoxville	L. B. Shumake Memphis
Norman Henderson Lawrenceburg	Joseph W. Graves Chattanooga
George Mayfield, Jr. Columbia	Sam Barnes Cookeville
Don Jackson Clarksville	R. S. Lowe Clarksville
Thurman L. Pedigo McMinnville	David H. Turner Chattanooga
John Hodges Memphis	James W. Hays Nashville
Charles Jordan Cookeville	Duane C. Budd Johnson City
Warren Hayes Springfield	Telford A. Lowry Sweetwater
Roy Money Nashville	George Liebermann Madison
Howard Thomas Savannah	Victor Braren Nashville
John W. Lamb Nashville	O. K. Smith Martin
D. L. McCroskey Maryville	Jerry Maynard Lebanon
James A. Moore Memphis	H. L. Neuenschwander Knoxville
Leon Reuhland Woodbury	Edward Welles Dresden
Richard J. Lombardo Millington	Arch Y. Smith Signal Mountain
E. P. Muncy Jefferson City	Arden Butler Ripley
O. S. Luton Clarksville	

programs and news of medical societies

Chattanooga & Hamilton County Medical Society

Medical Society Hosts TV Show—On Thursday, May 19, the Communications and Public Service Committee of the Chattanooga & Hamilton County Medical Society, Inc., aired a TV show, *Call the Doctor*, on Channel 3 TV.

C. Robert Clark, M.D., served as moderator for the show; William K. Dwyer, M.D., screened incoming questions addressed to the panelists. Other participants were Molly E. Seal, M.D. ("Eye Injuries"); Paul E. Hawkins, M.D. ("Snake Bites"); Ronald L. Molloy, M.D. ("Summertime Accidents"); and James W. Hedden, M.D. ("Dog & Insect Bites").

The Medical Society hopes that this adventure on television will be an interesting and informative public relations service to the community. The next *Call the Doctor* program is tentatively scheduled for September. Clifton R. Cleaveland is chairman of the Communications and Public Service Committee.

Maury County Medical Society

The Maury County Medical Society met at the Holiday Inn, June 7, 1977, with Tom Young, M.D., presiding. Thirty physicians attended the meeting. Robert Oldham, M.D., director of the Division of Oncology, Vanderbilt University, spoke on "Recent Advances in the Treatment of Oat Cell Carcinoma of the Lung and Patient Selection for Adjuvant Chemotherapy."

Nashville Academy of Medicine

CME Consortium Sought—The Nashville Academy of Medicine has proposed the creation of a consortium of local hospitals in an effort to develop accredited Continuing Medical Education (CME) programs on site at hospitals where physicians maintain staff privileges. This proposal has been met with tentative approval by most area hospitals and is planned for implementation by the fall. In effect, the plan would designate the Academy as the center for administering and evaluating CME programs in cooperation with local hospitals. It would permit the Academy to seek AMA accreditation via TMA which would enable the Academy to designate Category 1 credit toward the AMA Physician's Recognition Award for CME activities meeting the appropriate criteria. At present no local hospital (excluding the medical schools) may authorize Category 1 credit. The proposal would also provide for the establishment of a CME headquarters in the Academy building and the employment of a full-time program coordinator under the direction of the Academy's CME Committee which would be ap-

pointed and represented by all participating hospitals.

Medical Town Meeting—The first Medical Town Meeting, a reinstatement of the old Health Forum, will be held on Tuesday, July 12, at 7:30 p.m. in the WDCN-TV (Channel 8) studios, formerly the Central High School auditorium. Sponsored by the Academy and *Nashville Banner*, the meeting will be open to the public and will feature a discussion on "Heart Disease" by a physician panel chaired by Crawford Adams, M.D. The meeting will be publicized by the *Banner* and televised (live, full coverage) by Channel 8. Stay tuned for more info.

Special Brochures which explain the many reasons for the increase in medical costs over the past seven years will be published by the Academy and distributed to the membership this month. Every member is asked to make these brochures available to patients in their waiting rooms and other accessible areas.

national news

From the AMA's Office in Washington, D.C.

Feds Seek Lid for Hospital Costs

The House has moved swiftly to consider the Administration's sweeping Hospital Cost Containment program that has drawn the wrath of hospitals and physicians.

Joint hearings by the health subcommittees of the House Ways and Means and House Commerce Committees are in progress. Devising a bill, however, will take a long time and it could look much different than what the Administration is asking.

Rep. Paul Rogers (D-Fla.), chairman of the Commerce Health Subcommittee, said in introducing the Administration's bill that "we must proceed with care in this area." The influential lawmaker questioned whether "any system for controlling the increases in costs of hospital care will work over the long run unless . . . an incentive system is present" to encourage hospitals to hold down increases.

Rep. Dan Rostenkowski (D-Ill.), chairman of the Ways and Means Health Panel who also dropped the bill in the hopper, told the House that "I am sure there will be serious objections raised to the President's proposal. Some will argue that a cost containment program applying only to hospitals unfairly singles them out and will do harm to the quality and availability of necessary care."

The House hearings so far have met an almost solid block of opposition from health providers as well as tepid endorsement from labor.

Even more foreboding from the Administration's standpoint is the fact that no member of the health subcommittees of the House Ways and Means and House Commerce Committees took the role of all-out champion of the Administration proposal during the three days of joint hearings. Some lawmakers

directed criticism at hospitals and physicians in connection with the inflation in health care costs, but none of the congressmen seemed enamored of the Administration's scheme for dealing with the problem.

The AMA told the subcommittees the legislation singles out one segment in the economy for the imposition of special controls by limiting inpatient revenues of most hospitals to approximately a 9% increase annually. This is similar to the "opprobrious retention" of the "now discredited" wage-price controls to the health field in Phase IV of the economic stabilization program while removing controls from the rest of the economy, said Raymond T. Holden, M.D., chairman of the AMA Board of Trustees.

"The AMA is concerned over the impact that this legislation would have on the quality and availability of hospital care for the American people," said Dr. Holden. "It seems inescapable to us that the 'cap' on spending will result in second-rate care, and some care may simply become unavailable for many people."

The American Hospital Association, the Federation of American Hospitals, the American Protestant Hospital Association, the Catholic Hospital Association, and the Association of American Medical Colleges were among other health organizations that weighed against the Administration plan. The Health Insurance Association of America gave "somewhat qualified support" with many reservations. The Blue Cross Association proposed a national moratorium on new plant capital expenditures, but "we seriously question" whether the cap plan would be "effective or equitable."

Thrust of the testimony of the AFL-CIO and the United Auto Workers was that the wage increase "pass through" was inadequate and that a better approach would be to adopt the labor-backed national health insurance plan—the Health Security Act.

There was no immediate indication of how soon the joint subcommittees would begin work on legislation. Their calendars are chock full of other major business writing such a complicated bill and reaching a consensus will be a lengthy process.

The chairman of the AMA's Council on Legislation, Edgar T. Beddingfield, Jr., M.D., summed up the Association's criticism of the Administration bill by declaring the plan "does not support incentives for efficiency, perpetuates inefficiency in hospital care, creates a rigid program which in the long run would be unresponsive to improving quality of hospital care, discourages increased access to care, and penalizes institutions which seek to respond to increased community health needs."

Costs in the health sector of the economy do not always react with costs in general, the physician explained. The health care sector is labor intensive, technologically highly sophisticated, and staffed by highly trained and educated people.

The revenue "cap" plus the proposed new capital expenditure limitation "would be quite detrimental

to individual hospitals which seek to remain in the mainstream of modern medical treatment and care," said Dr. Beddingfield.

The AMA officials urged Congress to postpone any action until the AMA-convened National Commission on the Cost of Medical Care submits its report next January. Drs. Holden and Beddingfield agreed with Rostenkowski that the problem of rising costs is serious, but contended that the Administration bill would compromise the quality of patient care.

Senate Hearings Start on Cost Containment

Somewhat battered by its treatment in the House, the Administration moved its "cap" proposal to the more friendly environs of the Senate Human Resources Subcommittee on Health headed by Sen. Edward Kennedy (D-Mass.).

At the outset of Senate hearings on the Administration's principal health proposal of the year, Kennedy said the Administration's bill "is not perfect—but it is a starting point." Declaring he has a number of reservations about it, Kennedy nevertheless said "a transitional cost control program is needed: A program that is administratively simple, doesn't create a new bureaucracy, and will result in significant savings."

The Massachusetts senator put in his customary plug for labor's Health Security Act as "the only viable solution to the health care crisis in America," but he noted that this bill would require "a substantial lead time to implement."

The ranking Republican member of the subcommittee, Sen. Richard Schweiker (R-Pa.), said "our job is to decide if the Administration's temporary adjustment is a better approach than any number of long-range overhauls already pending before the Congress." He said "I still have some basic questions about the wisdom and the practicality of this approach."

Sen. Kennedy picked Georgetown University Hospital (Washington, D.C.) as an appropriate if off-beat site for the first Senate hearings on the controversial "cap" program.

Though the University proved a gracious host for Kennedy's health subcommittee, and hospital personnel were excited about the presence of big-name senators and Administration officials, the chief administrator of the hospital took the opportunity to tell Kennedy some of the facts of life about running a hospital and why the Administration plan would be burdensome.

Kennedy had noted in opening the hearing at the hospital auditorium that "I have counted on this hospital many times in the past when my own family so desperately needed medical care."

Charles O'Brien, GU hospital administrator, told the subcommittee as one of its witnesses that the impact of the proposed cost-containment legislation "will be to freeze at the current state the developments or expansion of new treatment courses."

"The program is administratively unworkable and entirely too complex to be equitably applied," O'Brien testified.

Joseph Califano, Secretary of HEW, said the hospital system is "obese." What the Administration is asking of hospitals, Califano testified, "is that instead of having five pieces of chocolate cream pie for dessert they try to hold it to one."

Califano offered few new details but insisted that hospital cost controls cannot await national health insurance.

The American Hospital Association renewed its strong opposition to the Administration's plan. AHA Senior Vice-President Leo Gehrig, M.D., said "this bill is inequitable in design, wrong in concept, and impossible to administer. We believe that its enactment would seriously jeopardize the present and future ability of hospitals to provide quality care to the American people."

According to Gehrig, "these controls are wrong because they would operate through a formula that continuously screws down increases in hospital inpatient revenues so that in the future they would be limited to a rate about equal to the rate of general inflation. Such an approach would eliminate all ability to incorporate improvements in care and fail even to keep up with the known rate of inflation in the hospital market basket."

AMA spokesmen Jere W. Annis, M.D., and William C. Felch, M.D., in testimony before the Senate subcommittee also attacked the Administration's "cap" proposal (dubbed the "9% solution" by Capitol Hill wags) with arguments basically similar to those used earlier before the House subcommittees.

Talmadge Renews Drive for Medicare Amendment

The chief rival to the Administration's bill is the so-called Talmadge measure drafted by the Senate Finance Subcommittee on Health headed by Sen. Herman Talmadge (D-Ga.). This bill, which was brought up for hearings last year, institutes a prospective reimbursement system for hospitals for Medicare and Medicaid with classification by type of institution and by region and includes many incentive and punitive provisions aimed at costcutting. Significantly, the bill was introduced in the House recently by Rep. Paul Rogers (D-Fla.), chairman of the House Commerce Health Subcommittee. Rep. Dan Rostenkowski (D-Ill.) head of the Ways and Means Health Panel, hasn't said which way he's leaning.

Introducing his long-awaited Medicare-Medicaid measure, Sen. Talmadge told the Senate of his "uncertainty over the wisdom of a cap on hospital revenues"—thus raising what many believe to be a storm warning.

Talmadge, influential chairman of the Senate Finance Subcommittee on Health, insisted his comprehensive bill was not a rival of the Administration's. But the questions he raised about the Administration's legislation made clear that the 9% cap

plan on all hospital revenues faces tough sledding in the Senate. The plan, Talmadge said, could "cause such chaos within the hospital field as to cancel the dubious savings involved."

Nineteen senators from both parties cosponsored the Talmadge measure. They included Sen. Russell Long (D-La.), chairman of the full Finance Committee.

Of the four major health subcommittees in Congress, only the Finance Subcommittee has not scheduled hearings to date on the Administration cap proposal which embraces all hospital functions, not just those involved with federal aid programs.

"Second Opinion" Law Called Unnecessary

The AMA has told the House Commerce Subcommittee on Oversight and Investigations that a second opinion "is just that and nothing more—an opinion which is, by definition, subjective and it can never be anything other than that," asserted James H. Sammons, M.D., AMA Executive Vice-President.

The subcommittee, headed by Rep. John Moss (D-Calif.), has engaged in a running controversy with medical groups since it issued a report a year ago implying there are many thousands of deaths due to unnecessary surgery. The issue has stirred calls on Capitol Hill for required second opinions and suggestions for establishing criteria for determining under Medicare and Medicaid the necessity of surgical procedures and which should be elective.

Dr. Sammons said "such an approach is contrary to sound medical practice."

"It is not the disease which determines whether the procedure is an emergency but rather the condition of the patient and the time and circumstances under which the patient is seen by the physician," said Dr. Sammons. The AMA official said an approach based on disease categories with hard and fast rules which allow for no variation "is not medically sound or in the best interest of the patient."

The AMA supports efforts to control costs "that do not sacrifice the interests of the patient to the interest of some abstract cost-benefit ratio," Dr. Sammons testified.

Dr. Sammons' appearance before the subcommittee was delayed for a week because of a dispute over the timing of delivery of AMA testimony to the subcommittee. Despite strong words that have been exchanged between Subcommittee Chairman Moss and the AMA over the unnecessary surgery issue, Moss did not level any broadside charges at Dr. Sammons' testimony. However, Reps. Anthony Moffett, (D-Conn.), Henry Waxman, (D-Calif.), and Andrew Maguire, (D-N.J.), had sharply critical remarks about the AMA.

Much of the debate centered on the frequency of hysterectomies in this country. Waxman asked if it is "a fad operation"? Moffett said the AMA had displayed "callousness, chauvinism and insensibility"

to surgery on women. Maguire shouted that there is "something wrong" because the AMA "fails to address the issue" of people dying unnecessarily from surgery.

Dr. Sammons vehemently denied the charges. The AMA has no desire to protect the guilty and the incompetent, he asserted. The question of what is necessary or unnecessary, what is wrong, must be decided at the peer review level, Dr. Sammons said. "I am certain in my own mind that there is surgery performed every day that I would not personally agree with, but that is true of all aspects of every profession," said the AMA official. The number of such cases would be very small, he stressed.

Too Much Surgery?

A dash of scholarly cold water was thrown on the flaring dispute in Congress over whether there is too much surgery performed in this country.

A news conference was held in Washington, D.C. by the Office of Health Policy Information at the Harvard School of Public Health to introduce a new book, *Costs, Risks and Benefits of Surgery*. One of the studies in the book said that present costs and risks of surgery "appear to be equal, or nearly equal to benefits."

Elective hysterectomy, a subject which has drawn much fire from members of the House Commerce Subcommittee on Investigations, raises the question of quality-of-life benefits, the book states. "It cannot be assumed that easy answers can be provided," it adds. "The individual patient may consider that the quality-of-life benefits of hysterectomy are sufficient to offset attendant risks; indeed, based on the extremely high hysterectomy elective rates reported for physicians' wives, who should be reasonably informed 'consumers,' it seems likely that many women will make this choice."

However, the book goes on, if and when society agrees to make "necessary" medical care available to every citizen as a right, "at issue will be the allocation of public funds for a procedure when it appears to be more of a convenience or luxury than a necessity, and in competition with growing demands for funds to pay for other medical procedures, many of which may present stronger claims."

The book was written by Benjamin Barnes, M.D., associate professor of surgery at Harvard Medical School; John Bunker, M.D., professor of anesthesia and of family community and preventive medicine at Stanford University; and Frederick Mosteller, Ph.D., chairman of the Department of Biostatistics at the Harvard School of Public Health. All three authors were present at the news conference as was Howard Hiatt, M.D., dean of the Harvard Public Health School, who wrote the foreword to the book.

FTC Threat Blocked

The threat of Federal Trade Commission direct jurisdiction over non-profit associations such as medical organizations has been blocked in Congress.

The House Commerce Committee by voice vote

rejected the proposal. The Senate Commerce Committee approved a bill that had been stripped of a similar provision following subcommittee adoption. The non-profit association provision was part of a broader measure extending FTC powers and penalties that was okayed by both committees.

At present, the FTC, which is currently engaged in a wide range of cases against medical-health groups including the AMA, must prove in court that it has jurisdiction over non-profit associations on grounds the challenged activity resembles a commercial activity and operates for the economic benefit of the members of a non-profit association.

This has proved a legal obstacle to some FTC actions against non-profit associations in the past. The FTC had urged Congress to adopt the plan. However, the AMA and a host of other non-profit associations argued that the new powers would give the federal agency more authority than Congress had intended as an instrument against unfair business practices. The effect would have been to lump all activities of non-profit groups in the same legal boat as those of commercial businesses.

Despite its victory in blocking the inclusion of non-profit organizations under the same flag as commercial business, the AMA and others will support a floor amendment to block a committee-passed

section of the legislation that would authorize class action suits (by private individuals) for violations of FTC rules.

Califano Criticizes AMA, AHA

The AMA and the AHA were criticized by HEW Secretary Joseph Califano for opposing the Administration's hospital cost containment plan.

Califano said the two organizations "have opposed virtually every progressive step in the health care area, every step for the government to become the catalyst and further expand service to the poor and needy."

In an interview with the *Washington Post*, the HEW Secretary said the major obstacles to congressional passage of the Administration hospital control plan are the AMA and the AHA. "They're very effective and strong lobbyists," he was quoted.

Califano predicted that despite opposition the plan will clear the House within a few months, but he conceded it faces "a more difficult" fate in the Senate.

Spokesmen for the AMA and the AHA denied Califano's charges of opposing progressive health measures. They noted support for expanded health programs covering everyone through private health insurance. The hospital control program won't work and could damage the quality of health care, they said.

Califano also told the *Washington Post* that hospitals should take a tougher line negotiating with hospital-based specialists who "get a percentage of the gross" income of their departments. "That's like the entertainment business," he said. "This is not the entertainment business."

HEW Apologizes to AMA

HEW Secretary Joseph Califano has expressed "deep regret" to the AMA at "the significant number of errors" in the March 12 publication of names of health providers whose 1975 Medicare income surpassed \$100,000.

"I am deeply distressed at the number of errors, and I regret any embarrassment that may have been caused to any of your individual members," Califano said in a letter to James H. Sammons, M.D., AMA Executive Vice President.

Following the original publication of the list, the AMA and some state medical societies checked 208 of the 407 physicians on the list and found an error rate of 64.9%. Dr. Sammons urged an apology for the mistakes.

Califano said he has asked Robert Derzon, administrator-designate of the new Health Care Financing Administration, to review the entire matter with the view toward taking whatever actions are necessary to prevent a situation like this from arising again.

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announcements

NATIONAL

1977

- | | |
|---------------------|---|
| July 31-
Aug. 5 | International Congress of Group Psychotherapy, Sheraton Hotel, Philadelphia |
| July 31-
Aug. 5 | National Medical Association, Bonaventure Hotel, Los Angeles |
| Aug. 11-13 | American College of Surgeons, Big Sky, Montana |
| Aug. 20 | American Rhinologic Society & International Rhinologic Society, Kansas City, Missouri |
| Aug. 28-
Sept. 3 | World Congress of Psychiatry, Honolulu |
| Sept. 1-6 | Pan American Medical Women's Alliance, Holiday Inn, San Juan, Puerto Rico |
| Sept. 7-9 | National Conference on Human Values and Cancer, sponsored by American Cancer Society, Palmer House, Chicago |
| Sept. 8-10 | American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Virginia |
| Sept. 9-11 | Mid-Continent Psychiatric Association, Oklahoma City |
| Sept. 10-11 | AMA Regional Meeting, Sheraton, Hartford, Connecticut |
| Sept. 10-12 | AMA Seminar on Negotiations, Radisson South Hotel, Bloomington, Minnesota |
| Sept. 15-17 | American Association for the Surgery of Trauma, Renaissance Plaza, Detroit |
| Sept. 16-17 | AMA Hospital Medical Staff Leadership Workshops, Carrousel Inn, Columbus, Ohio |
| Sept. 16-18 | AMA Regional Meeting, Tan-Tar-A, Lake of the Ozarks, Missouri |
| Sept. 24-25 | AMA Regional Meeting, Holiday Inn, Chicago |
| Sept. 25-29 | Kentucky Medical Association, Ramada Inn-Hurstborne, Louisville |
| Sept. 27-30 | American Roentgen Ray Society, Sheraton Boston, Boston |
| Sept. 28-30 | American Society of Internal Medicine, Washington, D.C. |
| Sept. 30-
Oct. 2 | AMA Regional Meeting, The Homestead, Hot Springs, Virginia |

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

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Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Robert N. Buchanan, Jr., M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Evert James, Jr., Sc.M., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

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Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1977-78

Aug. 4- Oct. 13	Internal Medicine Intensive Review (each Thursday—33 hours)
Fall, 1977	First Annual John S. Zelenik Lecture
Sept. 23-24	Pediatric Cardiology—8th Annual Pediatric Symposium (9 hours)
Sept. 29- Oct. 1	William F. Orr Lectureship in Psy- chiatry
Oct. 17-22	Family Practice Intensive Review (48 hours)
Nov. 1-5	6th Annual Rhamy-Shelley Lectures (16 hours)
Nov. 11-12	Anesthesiology Update 1977 (7 hours)
Dec. 1-2	What's New in Obstetrics for Phy- sicians? (10 hours)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
March 22-24	Clinical Endocrinology (21 hours)
Spring, 1978	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Sym- posium (12 hours)

- Spring, 1978 Annual Barney Brooks Lectureship in Surgery (1 hour)
- Spring, 1978 Annual L. W. Edwards Memorial Lecture (1 hour)
- April, 1978 Annual Frank E. Luton Lecture in Psychiatry (1 hour)
- May, 1978 Postgraduate Course in Allergy
- May, 1978 Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)
- May 24-25 17th Annual Seminar in Psychiatry, for Non-Psychiatrists (11 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Knoxville Unit

- Oct. 16-18 Cancer Concepts 1977—Sheraton Inn, Gatlinburg, TN. *Credit:* 12 hours AMA Category 1.
- Oct. 20-22 Pediatric Orthopedic Conference—Sheraton Hotel, Gatlinburg, TN. *Credit:* 11½ hours AMA Category 1.

For information and/or a brochure contact: Dr. Harvey Goodman, Director of CME, UTCHS, 1923 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

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For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1977-78

- Sept. 16-17 Fiberoptic Bronchoscopy Workshop—University of Kentucky, Lexington. *Credit:* 13 hours AMA Category 1. *Fee:* \$200.
- Oct. 2-7 Eighth Family Medicine Review (Session I and Session II)—Hyatt Regency, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

ALABAMA CHAPTER—AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

- Aug. 19-20 Update 77—Techniques in Emergency Medicine—Kahler Plaza Hotel, Birmingham.

For information contact: Dr. John Hard, Chairman of Registration, P.O. Box 2564, Birmingham, AL 35202.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 12-Nov. 4, 1977; Jan. 9-March 3, 1978; April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. An additional two-day course is offered for obstetricians on Dec. 8-9, 1977. *Credit:* 6 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS Regional Meetings, Postgraduate Courses

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American

Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category 1 requirements for the AMA Physician's Recognition Award.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Special ACP-MKSAP Courses

The ACP will sponsor 23 courses, providing intensive review of the entire spectrum of medicine, over a five-day (30 hour) period. These courses will differ from any ever presented in that they complement self-learning activities (through the ACP Medical Knowledge Self-Assessment Program—IV) and will also serve to prepare physicians for this fall's American Board of Internal Medicine recertification examination.

MKSAP Course Schedule

August

- 15-19 Atlanta, GA
Burlington, VT
New York, NY
- 22-26 Birmingham, AL
- 29-9/2 Baltimore, MD
Seattle, WA

September

- 7-11 Ann Arbor, MI
Richmond, VA
San Francisco, CA
- 14-18 Kansas City, MO
- 26-30 Cambridge, MA
Los Angeles, CA
Philadelphia, PA
Rochester, MN
Washington, DC

October

- 1-5 Montauk, LI, NY
- 3-7 Cincinnati, OH
Denver, CO
Houston, TX
Pittsburgh, PA
- 10-14 Chicago, IL
- 17-21 Cleveland, OH
New Orleans, LA

A catalog on the courses is available by writing: Registrar, ACP-MKSAP Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

AMERICAN PROFESSIONAL PRACTICE ASSOCIATION

Practice Management and Economic Seminar Schedule

- Aug. 20-27 Rome, Italy
- Oct. 2-9 Key Biscayne, Fla.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

July 11-

- August 7 Drugs and the Menopause Workshop, with John Moyer, M.D., director of professional and educational affairs, Conemaugh Valley Memorial Hospital, Johnstown, Pa.; Elizabeth Connell, M.D., associate director of health sciences, Rockefeller Foundation, New York City, and consultant to FDA Obstetrics and Gynecology Advisory Committee; Herbert Kupperman, M.D., Ph.D., director of endocrinology, Lenox Hill Hospital, New York City; Theodore King, M.D., Ph.D., chairman, Department of Obstetrics and Gynecology, Johns Hopkins Medical School, Baltimore, and chairman of the FDA Obstetrics and Gynecology Advisory Committee. This presentation is part of the American Society for Clinical Pharmacology and Therapeutics' Drug Spotlight program.

Aug. 8- Sept. 4

Chronic Hemodialysis: Maximizing the Potentials—with Eli A. Friedman, M.D., director of the Division of Renal Diseases, Downstate Medical Center, Brooklyn.

Assessing the Child with Acute Abdominal Pain—with Russell S. Asnes, M.D., director, pediatric ambulatory services, Columbia Presbyterian Medical Center, New York City.

The Undergrown Infant: An American Problem—with Myron Winick, M.D., director of the Institute for Human Nutrition, Columbia University College of Physicians and Surgeons, New York City.

BOWMAN GRAY SCHOOL OF MEDICINE

- Aug. 25-27 Three Days of Advanced Ultrasound of the Abdomen and Obstetrics—Dutch Inn, Lake Buena Vista, FL.

For information contact: James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

DUKE UNIVERSITY MEDICAL SCHOOL

- Oct. 24-28 Radiology Postgraduate Course—Southampton Princess Hotel, Bermuda.
Credit: 25 hours AMA Category 1.

For information contact: Robert McLelland,

M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

**UNIVERSITY OF ILLINOIS
COLLEGE OF MEDICINE**

Sept. 10-16 Annual Otolaryngologic Assembly of 1977—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact: Otolaryngology, 1855 W. Taylor St., Chicago, IL 60612.

**INTERSTATE POSTGRADUATE
MEDICAL ASSOCIATION**

Interstate Scientific Assembly

Oct. 31- 62nd Annual International Scientific
Nov. 3 Assembly of Interstate Postgraduate Medical Association—Diplomat Hotel, Hollywood, FL. In cooperation with the Fla. Acad. of Family Physicians, the Univ. of Miami, and the Univ. of Fla.-Gainesville. *Credit:* 26 hours AAFP and AMA. *Fee:* \$75 in advance; \$100 at the meeting.

For information contact: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, WS 53701.

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Request for Research Study Referrals

Vanderbilt University Hospital, in a study sponsored by the National Cancer Institute, is currently evaluating referrals for high dose methotrexate in the treatment of lung cancer. In a study funded by the National Cancer Institute and the Clinical Research Center at Vanderbilt Hospital we have available facilities for the investigative treatment of certain patients with lung cancer with high dose methotrexate. These treatments are available on a research basis at no cost to eligible patients. Two categories of patients are currently being studied:

1. Small cell carcinoma (oat cell or other small cell varieties) of the lung for treatment with high dose methotrexate and intensive chemotherapy. Patients should not have received prior chemotherapy or radiotherapy. Patients with all stages of disease would be considered.
2. Non-small cell carcinoma of the lung. These patients may have either resectable or unresectable disease and should have had no prior chemotherapy or radiotherapy. Only patients with local, extensive disease without widespread metastasis and general debility will be considered.

Referring physicians should contact F. Anthony Greco, M.D., or Robert K. Oldham, M.D., at the following address to refer patients for this study: Division of Oncology, Department of Medicine, Vanderbilt University Hospital, Nashville, TN 37232.

**Project Hope Announces
Release of New Motion Picture**

Project HOPE has announced the release of the new motion picture *Where There Is HOPE . . .*, a 16 mm. color film narrated by Jimmy Stewart, filmed on location in North Africa and South America, available in both 27-minute and 10-minute versions.

Since the retirement of the hospital ship S.S. HOPE, the medical education foundation has concentrated its teaching efforts in land-based programs. The new motion picture explains how HOPE goes about accomplishing its goal of improving health through education. It documents the work of a HOPE sanitarian at a public well site in Tunisia and a HOPE public health nurse working with mothers of a small village in Northeast Brazil.

Where There Is Hope . . . is available through Modern Talking Picture Service, 2323 New Hyde Park Rd., New Hyde Park, NY 11040, or by phone at (516) 437-6300.

**Many Women Abandon Pill
For Other Contraceptives**

Adverse publicity about oral contraception in recent years may be leading to a striking movement away from the pill and back to either mechanical barrier methods or no protection at all against pregnancy, says a research report in the Feb. 7 issue of *JAMA*.

A study of 100 women patients at the outpatient unit of the University of California at San Francisco Medical Center revealed that 53% of the women had changed contraception methods in the last two years, most commonly moving away from oral contraception.

Sixteen of the women in the study said they were using no contraception. One woman relied on the rhythm method, and 24 used a mechanical barrier (diaphragm, foam, or condom). Only 28 women were using oral contraceptives, while 16 had an intrauterine device in place. Eight relied on sterilization. Fourteen of the women were dissatisfied with their current method of contraception, usually because of possible hazardous side effects.

The study sought to determine current attitudes toward reproductive and sexual roles. Major areas of change apparent in the younger population were a substantial decrease in formal marriage, a reduction in the wish for children, a movement away from oral contraception and back to mechanical barrier methods, and a shift toward acceptance of a bisexual adaptation.

The patients were interviewed by a woman medical student, who previously had been a psychiatric nurse, on the premise that women would talk more candidly with a woman than with a male physician. Age range of subjects was from 19 to 75 years, with a median age of 27.9.

A high percentage of nonmarital cohabitation (23%) and single living (17%) marks a new adherence to alternate life-styles. Some 37% of heterosexual women said they considered a homosexual relationship to be a future possibility.

**Zinc Tablets Found Helpful
In Controlling Acne**

Tablets of zinc are effective in controlling acne, a Swedish research group reports in the January issue of *Archives of Dermatology*.

The patients were given three tablets daily of zinc sulfate in effervescent form. The tablets were dissolved in water and taken after meals three times daily. After four weeks there was a significant decrease in the number of blackheads, whiteheads, and pimples. After 12 weeks, the acne had been reduced by 85% in those treated.

Some 64 patients were included in the study. More than half had had acne for more than two years, and many had been afflicted for more than five years. Ages ranged from 13 to 25 years.

Some of the patients were given zinc alone, others were given a combination of zinc and Vitamin A,

some were given Vitamin A only, and some were given only a placebo. Those on a zinc diet showed marked improvement. Vitamin A had no impact.

After 12 weeks of treatment, the mean acne score had decreased from 100% to 15%. The effect of zinc therapy in some patients with severe inflammatory acne has been remarkable. The group does not yet know how zinc works to reduce acne.

AMA Produces New Edition Of Drug Evaluation Book

The third edition of *AMA Drug Evaluations*, the AMA's compendium of information about drugs for the physician, has been completely revised, updated and expanded. It contains more than 1,300 pages of essential data for today's drug-prescribing or dispensing physician. It evaluates most available drugs and compounds and recommends dosage ranges. Included are generic and proprietary names, structural formulas, indications, contraindications and adverse reactions.

The 87 chapters of the book have been completely updated and reorganized. Included are evaluations of 61 new drugs and dosage forms and expanded information on some drugs that are under study but not yet on the market. Information is included on timed-release preparations, labeling, use of drugs in pregnancy, prescribing controlled psychotropic drugs, and interactions. More than 700 diagrams, 20 tables, two indexes, and an appendix on drug interference with laboratory tests are included.

The inclusion of a particular drug in *AMA Drug Evaluations* does not imply endorsement by the AMA, and it should not be a criterion for approving the use of that drug in any institution or for any other purpose, the AMA points out. The purpose of the volume is to provide the medical profession with an evaluation of selected drugs based on the available evidence. The evaluation may be favorable, unfavorable, or a combination of both.

In dealing with different brands of the same drug, the AMA points out that not all brands and generically labeled forms of the same drug are necessarily therapeutically equivalent. Differences in coating, binders, particle size, rate of dissolution, purity of ingredients, and other factors can lead to variations in absorption and biological availability of a drug. The degree of consistency from batch to batch will depend upon the manufacturer's quality controls.

Prepared by the AMA, the book is published by Publishing Sciences Group, Inc., 545 Great Road, Littleton, MA 01460. It is available directly from the publisher, and not through the AMA.

Diagnostic X-Rays Declared Harmful

The dialogue among medical experts regarding possible genetic harm from low doses of diagnostic x-rays continues in the May 30 issue of *JAMA*. A study concludes that there is clear prima

facie evidence that exposure to the low levels of ionizing radiation can produce a drastically increased risk of leukemia and other diseases in the children of persons exposed to these levels.

For the minority of exposed persons (about 1%) who are affected by the radiation, there is a 50-fold increase in the risk of leukemia and a five-fold increase in certain other diseases. These findings refute a dogma that is often cited by radiologists who claim that diagnostic radiation is harmless.

In commenting on the study, medical authorities pointed out that benefits from low dosage diagnostic x-rays, which can determine in advance many serious medical problems related to childbirth, are substantial, and benefits must be weighed against risk.

Damage from x-ray appears in 1% of the children in the study.

It has been assumed that genetic damage is virtually eliminated by a process known as fractionalization, in which the total dose of radiation is administered in small doses at intervals. But genetic damage still occurs even with fractionalization. Fractionalization creates the illusion that the genetic damage has disappeared, when, in actuality, the genetic damage to the population is, if anything, increased.

When a mother is exposed to radiation during pregnancy, genetic damage occurs in only a small proportion of babies. This damage will later be expressed as increased risk of certain childhood diseases. Diseases in addition to leukemia are asthma, skin rash, eczema, pneumonia, dysentery, and rheumatic fever.

AMA Issues New Edition Of Professional Standards Book

The first comprehensive revision of standards of professional responsibility for physicians is off the press. The book, *Opinions and Reports of the Judicial Council*, is a compilation of interpretations, opinions and statements of the AMA's Judicial Council with regard to application of the AMA's Principles of Medical Ethics to the everyday practice of medicine. The new version of *Opinions and Reports* reorganizes the material into an outline based on subject matter.

The chapters of the book deal with the physician's responsibilities to the public, patient relations and medical responsibilities, office practices, interprofessional relations, and hospital relations.

Reflecting the changing times in medicine, the new book includes items on such matters as human experimentation in medical research, helping patients and families cope with terminal illness, and the definition of death and new medical technology.

Guidelines are presented for physicians testing new drugs and procedures on humans. The guidelines are aimed at full protection of the subjects at all times during the research studies, stressing that full and informed consent must be obtained.

On the question of a statutory definition of death, the book states that it is neither desirable nor necessary for physicians or patients, as it may result in confusion instead of clarification as advances in scientific capabilities occur. Death should be determined by the clinical judgment of the physician using the necessary available and currently accepted criteria.

The book also states that the "intentional termination of the life on one human being by another—mercy killing—is contrary to that for which the medical profession stands and is contrary to the policy of the AMA." On the other hand, the "cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family. The advice and judgment of the physician should be freely available to the patient and/or his immediate family."

In the area of advertising and solicitation, the Council reiterates its April 1976 statement. The use of office signs, professional cards, dignified announcements, telephone directory listings, and reputable directories are mentioned as examples of making information or intention known to the public.

It is also noted that physicians "Have an ethical duty to subordinate financial reward to social responsibility. . . . Ability to pay should be considered in reducing fees, and excessive fees are unethical."

In meeting responsibility to the public, physicians are urged to cooperate with the communications media to bring accurate information about medicine and health to the people, keeping always in mind that the first responsibility is to the patient.

Copies of the book are available from the Order Department, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610.

Immunizations of Children In U.S. Lag, Experts Say

In spite of convincing evidence that successful immunization can safely and effectively prevent

diphtheria, whooping cough, tetanus, polio, mumps, measles and rubella, it seems incredible that more than 5 million children in the United States are not protected against these diseases, says a communication in the May 16 issue of *JAMA*. In spite of availability of safe and effective vaccines, there continue to be periodic outbreaks of these preventable diseases.

The outbreaks occur among groups of persons who have never been immunized and among others in whom immunization failures have occurred. Failures of measles vaccine have occurred when the vaccine was rendered impotent from poor refrigeration or excessive exposure to light or heat.

Twenty percent of children under 13 years are not adequately immunized against diphtheria, tetanus and whooping cough; 30% of those 1 to 4 years are not adequately protected against polio; about 35% of 1- to 4-year-old children have never been immunized against measles and rubella.

The authors list the recommended immunization schedules for normal infants and children, beginning at the age of two months with diphtheria, tetanus, whooping cough, and polio, and extending at regular intervals through age 16. Tetanus should be repeated every ten years for life.

Steroids Related to Cancer In Body-Building Athletes

For some years physicians have warned athletes against use of anabolic steroids in body-building and muscle-building training programs.

In recent years cases of cancer of the liver associated with use of the steroids have been reported. And in the May 23 issue of *JAMA*, still another hazard—cancer of the kidney—is related.

A case is described of a 38-year-old man who had devoted his adult years to physical conditioning as a competitive body builder and won national recognition for this in the 1960s. The diagnosis was Wilms' tumor, a rapidly developing malignant tumor of the kidneys. It usually affects children under 5 years, and only rarely occurs in later life. In this case the tumor already had spread toward the heart and lungs, and the patient died in a few months, despite surgery and efforts at drug treatment.

In interviews with several persons who were closely associated with the man and were familiar with his training routine, it became clear that he had taken anabolic steroids, a commonplace practice among competitive body builders, for many years. He took both injections and oral doses. The exact drugs were difficult to ascertain, because the drugs were not prescribed by physicians, but were supplied by friends, trainers, and nonmedical healers.

In view of the known association of liver cancer and the use of steroids, it is likely that the drugs may also have been related to the kidney tumor.

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Adverse Reactions to Commonly Prescribed Drugs In Patients with Renal Insufficiency

CHARLES J. McALLISTER, M.D.

The number of patients with renal insufficiency and end stage renal disease under treatment in the state of Tennessee is increasing yearly. This is due in part to the early diagnosis of renal insufficiency by primary care physicians and in part to the recent increase in availability of center and home dialysis. This necessitates a heightened awareness on the part of primary care physicians of the potential adverse reactions to commonly prescribed agents in patients with renal insufficiency or end stage renal disease. This article describes toxic reactions to several commonly prescribed agents in patients with renal disease.

Sedatives and Tranquilizers

The most commonly prescribed sedative, flurazepam (Dalmane), has caused toxic reactions in patients with chronic renal insufficiency (creatinine clearance less than 30) and in patients maintained on dialysis. These adverse reactions are characterized by confusion, disorientation and excessive lethargy.^{1,2} The use of Dalmane is consequently to be discouraged in these patients. Barbiturates, although not causing toxic side effects with regularity, have been noted to be less than effective in patients with renal insufficiency. The drugs of choice for sedation in patients with renal insufficiency appear to be diphenhydramine (Benadryl) and diazepam (Valium). Both agents have been employed successfully without adverse side effects. Chloral hydrate also appears to be a useful agent.

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Antihypertensives

The high prevalence of hypertension in patients with renal insufficiency and end stage renal failure has brought about extensive experience in the use of various antihypertensive agents in these patients. Both propranolol and hydralazine appear to be safe agents in patients with renal insufficiency. Methyldopa (Aldomet) in high doses has caused difficulties with hypotension in patients maintained on hemodialysis, which is noted especially during the dialysis procedure. There is also evidence to suggest that the excessive sedation and mental lethargy previously reported in patients treated with this agent may be accentuated in patients with renal insufficiency. Guaneethidine (Ismelin), although an effective agent for control of hypertension, should be avoided in patients on dialysis. In patients with creatinine clearances less than 20 cc/min, it has been reported to cause deterioration in renal blood flow with resultant further depression of renal function. Prazosin (Minipres), a recently introduced vasodilator, appears to hold promise as an effective agent for the control of hypertension in patients with renal insufficiency.

Analgesics

Adverse reactions to morphine have been well reported in patients with renal insufficiency. Therefore, administration on a chronic basis is to be avoided. Meperidine (Demerol) has also been reported to cause adverse reactions, such as profound hypotension and lethargy, particularly in patients maintained on hemodialysis.

RENAL INSUFFICIENCY/McAllister

Certain metabolites of meperidine have been reported to cause seizures in patients with renal insufficiency. One such case has been seen at Vanderbilt University Hospital in the last year. Pentazocine (Talwin) has been used with relative frequency in patients with renal insufficiency and few adverse reactions have been noted. An increased incidence of hallucinations and other previously described side effects of pentazocine have not been observed. Acetaminophen (Tylenol) and propoxyphene (Darvon) have been used without significant side effects for the induction of mild analgesia. Aspirin use is to be avoided, as salicylates may aggravate some of the gastrointestinal abnormalities noted in uremia as well as exacerbating the previously described platelet defect in patients with renal insufficiency or end stage renal disease.

Cardiotropic Agents

The cardiac glycosides when employed in patients with renal insufficiency must be used with caution. The greatest potential for toxicity is manifest in patients maintained on hemodialysis, where the rapid shifts of serum potassium levels induced by dialysis may precipitate arrhythmias or other manifestations of cardiac glycoside toxicity. Frequent monitoring of serum levels of digoxin or digitoxin is warranted. Several authors have dealt with this topic in detail.³

Both procainamide (Pronestyl) and quinidine⁴ are primarily excreted in the urine. These drugs should be employed with caution in patients with renal failure. Serum levels are again suggested. If these determinations are not available a reasonable starting dose would be in the range of 25 to 50% of the normal dose.

Antimicrobials

The use of antimicrobial agents in patients with renal insufficiency or end stage renal disease often presents a bewildering task to the physician. The particular susceptibility of the kidney to damage with antimicrobials and the primary renal route of excretion of many of the agents calls for the employment of these drugs with extreme caution.

The aminoglycosides⁵ continue to be offenders with their unique potential for nephrotoxicity. Numerous reviews deal with this problem⁶ and dosing schedules correlating the administered

dose with the level of serum creatinine or creatinine clearance are available. The only agents which appear to be able to be given in normal dose ranges appear to be chloramphenicol and clinamycin. Several of the penicillin derivatives, dicloxacillin (Tegopen) and ampicillin can be given initially in standard dosages but monitoring of serum levels is recommended.

Psychotropic Agents

The phenothiazines have been shown recently to have the potential for causing adverse reactions in patients with renal insufficiency or end stage renal failure. The induction of a toxic psychosis secondary to chlorpromazine use has recently been described and will be the subject of a future paper. Haloperidol, a butyrophenone, has also been noted to produce excessive sedation as well as inducing extrapyramidal symptomatology in patients with end stage renal disease.⁷ The use of amitriptyline (Elavil) in patients with renal insufficiency has as of the present time proven relatively safe. The primary renal mode of excretion of this agent would suggest that an initial modification of the beginning dose by 50% would seem prudent.

Conclusion

As can be readily seen by the examples cited in this brief review, the potential for adverse reactions to agents commonly prescribed in general medical practice is heightened in patients with significant renal insufficiency or end stage renal disease. The reduction in the renal route of excretion of many of the agents cited as well as altered drug binding may contribute to the increased toxicity observed. The alterations in drug activity induced by the uremic state also may play a role in the observed adverse reactions. Thus careful reflection and consideration is called for when prescribing medications in patients with renal insufficiency.

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Advances and Precautions in Lacrimal System Surgery

SPENCER P. THORNTON, M.D.

Dacryocystitis may produce or be the result of obstruction in any part of the lacrimal drainage system that extends from the canaliculi to the lower end of the nasolacrimal duct. Except in the very young, in whom the cause is usually congenital occlusion and is responsive to probing, dacryocystitis rarely resolves spontaneously. It is always a source of annoyance to the patient and is frequently accompanied by pain and discomfort in addition to the embarrassment of constant tearing.

The necessity for surgery for dacryocystitis is not always appreciated by the physician, as repeated attempts at probing and medical control is a common story with these patients.

In children, dacryocystitis is usually the result of congenital stenosis of the nasolacrimal duct. Probing, though it should be tried, is generally ineffective after the age of three years and surgery should be performed without prolonged delay once the diagnosis is confirmed.

Once dacryocystitis has been established in adults, medical management, including probing, irrigation, and antibiotic therapy is futile. The annoying epiphora, which is the patient's chief concern, will persist.

For most of this century the standard treatment for chronic dacryocystitis has been the edge to edge anastomosis of the lacrimal sac mucosa to the nasal mucosa over the margins of an opening made through the lacrimal bone.

In properly selected cases, with careful surgical technique, the results have been extremely good. The failures of this technique have been attributed to many factors and the problems involved in dealing with them have led to a number of unique instruments and devices which have contributed to increasing success. These include the Stallard stricturotome, the Jones pyrex tubes, the Guibor canaliculus intubation, and various types of communicating tubes.

Complications with dacryocystorhinostomies have included complete or partial closure of the fistulous tracts, corneal erosion from contact with

tube implants, formation of granulation tissue over the opening of the tube, the "sump syndrome," and regrowth of mucous membrane over the nasolacrimal opening. Reoperation has frequently been necessary.

In considering these problems it is apparent that obstruction may involve several levels and in order to perform the correct procedure the physician must know the extent of involvement and level of obstruction. A thorough clinical examination of the patient's lacrimal drainage system is imperative. This should include palpation, massage, probing, irrigation and dye tests supplemented by radiographic dacryocystography and nuclear gamma camera scan if available.

A rational basis for diagnosis and management of disease of the lacrimal drainage system is contingent on accurate preoperative assessment of the lacrimal drainage system. This necessitates not only the demonstration and localization of any anatomic defect but the assessment of the functional capacity of each segment as well.

Satisfactory results will be obtained and failures avoided only if the proper surgical procedure is applied to the correct area of involvement. Most important is the accurate diagnosis of the area and level of involvement including the punctal, canalicular, sac, upper nasolacrimal, lower nasolacrimal duct and valve of Hasner.

If, for example, it has been established that the obstruction is in the upper nasolacrimal duct the decision then is between some method of reconstruction of the nasolacrimal duct or of a nasolacrimal duct bypass operation such as the standard dacryocystorhinostomy procedure.

Though a number of factors have been involved, most failures following the standard technique of dacryocystorhinostomy seem to be due primarily to surgical technique or because the operation was directed at the wrong level. Thus it is important to consider multiple diagnostic methodology, including dacryocystography, nuclear lacrimal scan and quantitative scintillography in addition to physical probing, irrigation and chemical transmission studies.

Nasal pathology should also be considered. If

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LACRIMAL SYSTEM SURGERY/Thornton

intranasal pathologic conditions exist that might contribute to the improper functioning of the dacryocystorhinostomy these conditions should be corrected as much as possible before lacrimal surgery is undertaken. Nasal polyps, nasal allergies, severe septal deviations toward the involved side and sinusitis are some of the more frequently encountered nasal conditions that may require treatment.

Viers¹ points out that inaccurate or "false negative" diagnoses in the face of chronic or recurrent dacryocystitis may result from inadequate evaluation. For example, the ophthalmologist may be able to irrigate fluid into the nose and decide that this indicates no pathologic condition of the nasolacrimal duct systems exists. In many cases such patients have dacryoliths, lacrimal sac tumors, allergic stenosis of the nasolacrimal valve or functional occlusion of the nasolacrimal duct. In these cases dacryocystography is an invaluable aid in determining the level and extent of obstruction.

Correction of punctal, canalicular, lacrimal sac and nasolacrimal duct problems should be considered *separately* for treatment, and if multiple involvement is found, multiple corrective measures should be planned.

Dacryocystography is a simple, safe and quick method of obtaining information concerning the status of the lacrimal drainage system. It is not the final word however. It should be considered as an adjunctive diagnostic procedure to supplement the thorough clinical examination.

A number of studies indicate nuclear scanning may be as reliable as the dacryocystogram and requires less manipulation and discomfort for the patient. Technetium 99 in a vehicle of saline, polyvinyl alcohol or hydroxypropyl methylcellulose has been shown to effectively trace a radioactive tear through the nasolacrimal tract into the nose.

This test seems safe, from the evidence provided, even if one assumes that 100% of the radioactivity instilled remained in the sac and none was washed away by tears. Actually, in practice, the patients flush their eyes with an irrigating solution after the scan, which will reduce the radioactivity considerably.

In this test, there need not be any manipulation of the puncta and canaliculi. No force is required to inject the material into the lacrimal canaliculi and sac. It is, therefore, much more comfortable for the patient. The technetium scanning method appears to be useful and provides information on both anatomic and functional blocks, though experience has shown it cannot always differentiate between the two. It is, however, an important adjunctive diagnostic tool for evaluation of the lacrimal drainage apparatus.

In summary, it is important to consider multiple diagnostic methods in the evaluation of nasolacrimal system disorders in order to plan the proper surgical procedure to the correct area of involvement.

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- It is a podium from which to disseminate AMA thinking on a variety of subjects of concern to government—AMA agreement, disagreement, caution, modification, proposed solution, or information to lawmakers and media alike.
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AMA Washington Office

Malignant Melanoma Presenting as Peritoneal Effusion

ROBERT W. WAHL, M.D. and JERRY VAN PELT

Introduction

The diagnostic accuracy of the cytologic method in evaluating effusions is recognized. Cee-lan,¹ for example, demonstrated overall accuracy of cytology in positive and negative effusions to be approximately 90%. In his summary, Ceelan stated that "the cytological examination of ascitic fluids, although of no use in the early diagnosis of carcinoma, is a valuable tool for the differential diagnosis of peritoneal effusions." In general this is true; however, on occasion primary diagnosis in a puzzling case is obtained on the basis of cytologic study. Such was the case in this instance of metastatic malignant melanoma in peritoneal effusion.

Case History

The patient was a 57-year-old caucasian female who presented with a one-week history of "mild abdominal bloating." One day prior to admission she had the onset of left upper quadrant abdominal pain. Abdominal roentgenograph revealed many dilated loops of bowel. Past history as obtained was not remarkable. She reported constipation over the past two to three months, but no diarrhea or melena. There had been no weight loss. In 1961 she had undergone hysterectomy and appendectomy for benign disease.

On physical examination she was afebrile and normotensive. The abdomen was moderately distended, tender, and tympanitic. She had no lymphadenopathy. Skin examination was initially felt to be unremarkable.

Laboratory values on admission were within normal limits with the exception of a mildly elevated leukocyte count with a left shift.

Barium studies did not confirm an obstruction of the large or small intestines. On the seventh hospital day a right pleural effusion was tapped which showed charac-

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Mr. Van Pelt was a student in the School of Cytotechnology, Brooke Army Medical Center.

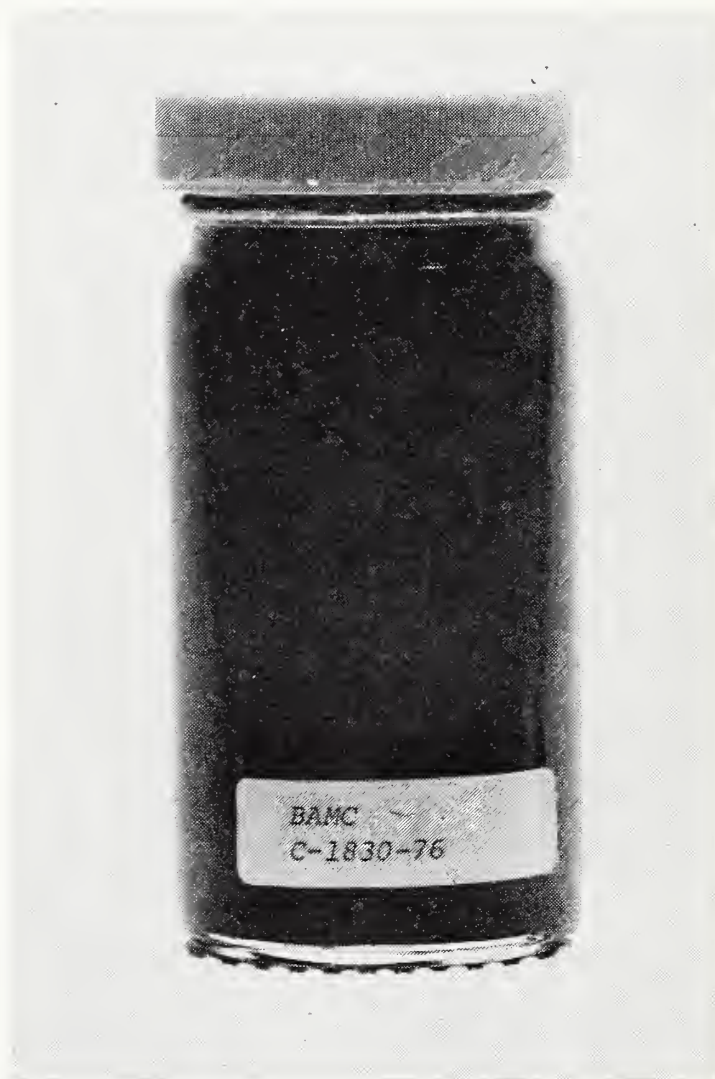


FIG. 1. Gross appearance of ascitic fluid.

teristics of an exudate. An abdominal sonogram indicated a questionable pelvic midline mass. Meig's syndrome was considered. Paracentesis was productive of 750 cc of dark brown fluid (Fig. 1), and it was suspected that the dilated bowel had been entered. Cytologic diagnosis on the effusion was malignant melanoma. Further evaluation of the patient led to discovery of a small subcutaneous scalp lesion which proved to be metastatic malignant melanoma. While there was no identifiable primary lesion, review of surgical pathology files indicated an atypical melanocytic lesion had been

incompletely removed five years previously.

She was placed on a multi-drug chemotherapy regimen, but followed a progressively deteriorating course, dying on the 30th hospital day. At autopsy, massive melanomatosis was present, the abdominal cavity presenting a diffuse dark brown pigmentation secondary to confluent growth of malignant melanoma.

Microscopic Findings

The specimen received in the cytopathology laboratory consisted of 750 cc of dark brown, opaque fluid (Fig. 1). No fixative had been added, the specimens having been brought directly from the patient's bedside. Because of the unexplained nature of the case and also because of the fear that the fluid was of intestinal lumen origin, the request was made for immediate cytological evaluation. A centrifuged aliquot was smeared, fixed in 95% ethanol, and stained with hemotoxylin and eosin.

The smears were remarkable for the absence of any blood or amorphous material. From low power study the smear was indicative of a fairly uniform population of isolated round to oval cells with only focal areas of aggregation. Inflammation was not evident. The cells were in the size range of mesothelial cells, and had strikingly eccentric nuclei to the extent that a plasma cell population was considered. However, on higher magnification, additional features were delineated. No perinuclear halos, as seen in plasma cells, were identified. Many of the cells contained a finely granular brownish, nonrefractile pigment which explained the gross coloration of the fluid (Fig. 2). Following Fontana-Masson staining, virtually every cell was seen to contain granular material consistent with melanin (Fig. 3).

The nuclei of this cellular population were round to oval with a finely granular to coarse chromatin pattern. Nuclear margins were sharp. Occasional prominent nucleoli were present, but striking macronucleoli were not seen. Many of the nuclei contained large punched-out areas which had a staining quality similar to the cytoplasm suggesting a cytoplasmic invagination into the nucleus (Fig. 2). Multinucleated tumor cells were present, but only in small numbers. Rare mitotic figures were identified, but no atypical mitoses were seen. On Papanicolaou staining the pigment was less obvious than on the initial hemotoxylin and eosin stain. Coloration of the pigment with this stain was greenish.

Definitive identification of mesothelial cells and histiocytes was hindered by the similarity of many of the tumor cells to those cell types. Some cells

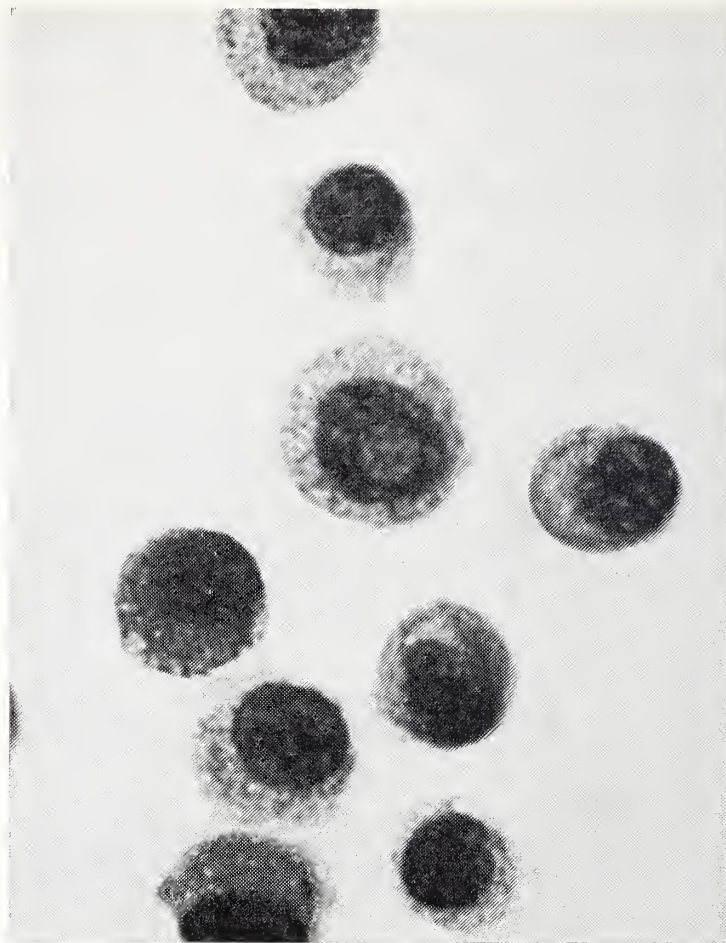


FIG. 2. Cells in ascitic fluid showing isolated nature of component cells, eccentric nuclei, granular pigment in cytoplasm, and large punched-out vacuole in one nucleus (hemotoxylin and eosin x 250 before enlargement).

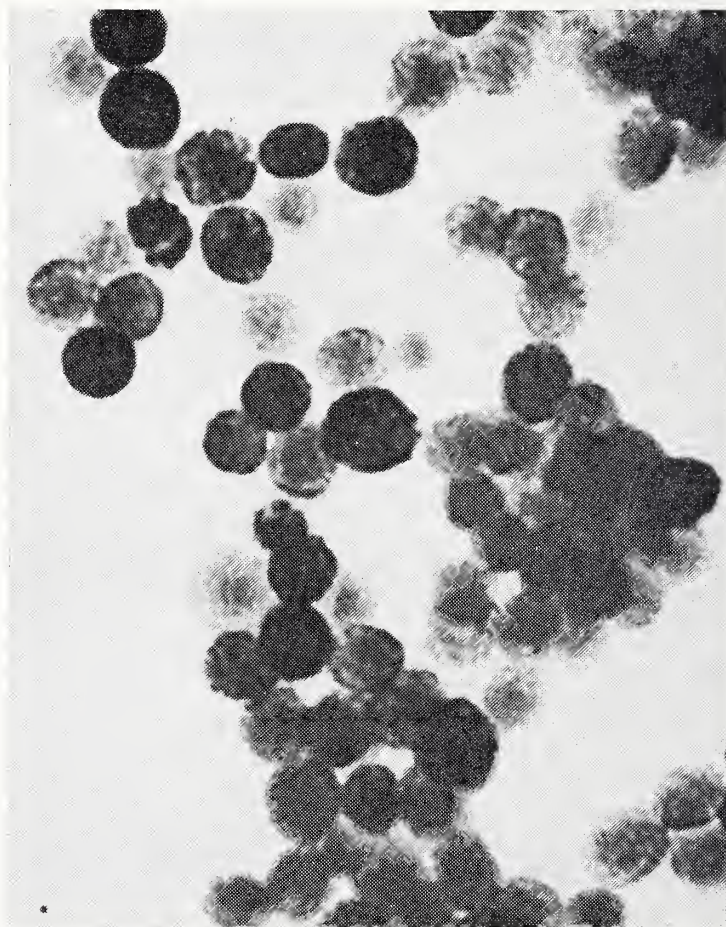


FIG. 3. Fontana-Masson stain showing varying degrees of melanin pigment in virtually every cell (x 160 before enlargement).

showing dense, coarsely granular staining on the Fontana-Masson stain were undoubtedly histiocytic.

Microscopic appearance of the metastatic lesion in the subcutaneous tissue of the scalp revealed cellular morphology closely correlating with the cytologic preparation. Occasional cells contained the punched-out area in the nucleus (Fig. 4).

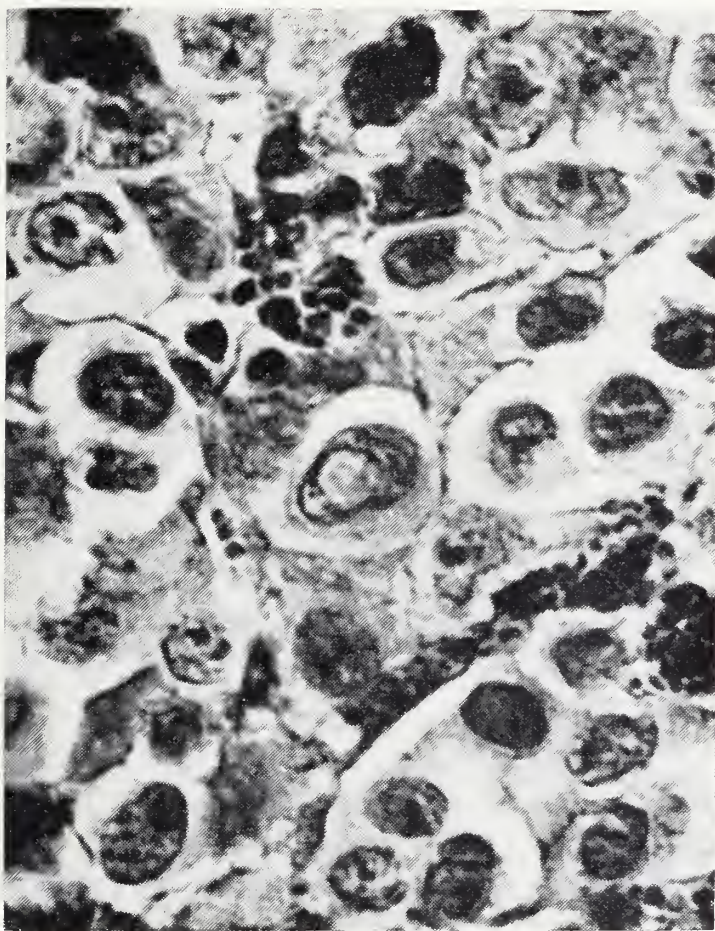


FIG. 4. Histological section of metastatic subcutaneous lesion of scalp showing cells similar to those seen in the ascitic fluid. Note intranuclear vacuole in central cell (hematoxylin and eosin x 250 before enlargement).

Discussion

Pleural or peritoneal effusion is said to complicate the course of about 50% of patients with metastatic malignant melanoma;² however, in our laboratory, malignant melanoma in effusion has been distinctly uncommon. For malignant melanoma to be diagnosed initially by study of effusion is noteworthy, but not necessarily difficult if one realizes that such an event can occur and if one has knowledge of the diagnostic criteria.

The cytologic studies of malignant melanoma have dealt with various sites—for example, oral scraping, pleural and spinal aspiration and sputum in the article by Yamada et al;³ in urine sedi-

ment as discussed by Piva and Koss;⁴ in the vagina in the series of Masubuchi et al;⁵ and in effusions plus other areas in Hajdu and Savino's study.² Several have made special reference to the presence of nuclear vacuolation.^{2,3,5}

The nature of the nuclear vacuoles has been studied by several researchers. Forty years ago the suggestion was made that the areas were related to melanogenesis,⁶ but ultrastructural studies have shown the vacuoles to be cytoplasmic invaginations.⁷

Primary diagnostic features in this case include the following:

1. Isolated nature of the cells with little tendency to form even small epithelial aggregates.
2. Presence of finely granular nonrefractile pigment which was found to be present in almost all the cells of the effusion on Fontana-Masson stain.
3. Eccentric nature of the nuclei.
4. Punched-out intranuclear vacuoles which stained similarly to the cytoplasm and which frequently had a diameter greater than 50% of the nuclear diameter.

Features emphasized by Hajdu such as the disparity in size of pigmented and nonpigmented tumor cells and the presence of bizarre and atypical multinucleation were not notable aspects of this case.

A grossly brownish effusion in the absence of obvious microscopic explanation should lead one to closely evaluate the component cells for finely granular pigment. Occasionally melanomas are amelanotic, in which case the nuclear vacuoles might be the only clue in those cases where the malignant cells closely mimic the morphology of mesothelial cells and histiocytes.

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Management of Diabetic Patients With Low Blood pH

IRSHAD AHMAD, M.D. and LLOYD DAVIS, M.D.

Diabetes mellitus has become a major public health problem in the world today; well-defined objectives for the prevention and treatment of the disease and its complications are important. Considering the nature of its etiology, effective preventive measures are difficult, but clear-cut and effective guidelines for the management of its acute complications can be established. In this paper two case histories dealing with the complication of low blood pH values will be presented. The first case history is of a young diabetic on insulin therapy, and the second one is of an adult onset diabetic who was treated with phenformin (DBI), a hypoglycemic agent.

Case Reports

Case 1. A 21-year-old man who has been treated in the hospital on numerous previous occasions, was admitted to the hospital on April 24, 1977 in a lethargic state with Kussmaul breathing. The patient was thought to have severe metabolic acidosis. Urinalysis showed 3+ albumin, 4+ acetone and 4+ glucose. Other laboratory results included: blood pH = 7.001, pCO_2 = 18.0, pO_2 = 33.1, percent hemoglobin saturation = 45, CO_2 = 8, glucose = 630, chloride = 101, Na = 136, K = 5.0, BUN = 14. The patient was immediately treated with 134 meq of sodium bicarbonate ($NaHCO_3$), 10 meq of potassium chloride (KCl) and 10 units of regular insulin. Intravenous 5% dextrose in 0.5 normal saline solution, with 20 meq of KCl, at 300 ml/hour was then started. Two hours later the laboratory results were: pH = 7.122, glucose = 540, CO_2 = 9, K = 3.9, Na = 135, BUN = 14. With continued treatment for four hours, the blood chemistry results were: pH = 7.225, pCO_2 = 10.2, pO_2 = 118.7, percent hemoglobin saturation = 97, and K = 3.8. Thirty-six hours after admission, the blood chemistry changed to: pH = 7.392, CO_2 = 29.7, pO_2 = 105.3 and percent hemoglobin saturation = 98.2. The patient was discharged the next day on NPH insulin 50 units in the morning and 10 units in the evening daily. During the three years' association with this patient, the lowest blood pH of 6.814 was recorded on Dec. 21, 1976.

Case 2. A 63-year-old man, a known diabetic on

phenformin regimen, was admitted to the hospital in coma with metabolic acidosis. The laboratory results at 6:30 am included: blood pH = 6.868, pCO_2 = 20.8, Na = 132, K = 7.5, Cl = 95. One ampule of sodium bicarbonate was infused immediately over a period of 10 minutes, regular insulin of 10 units was also given I.M. The bicarbonate dosage was repeated every 30 minutes until the blood pH exceeded 7.2. During the therapy the blood pH values at the given times were: 6:30 am = 6.868, 10:45 am = 7.04, 11:35 am = 7.102, 12:30 pm = 7.202, 1:30 pm = 7.344, and 4:30 pm = 7.455. The following day he developed metabolic alkalosis, pH = 7.582, which was treated with ammonium chloride, and the blood pH decreased to 7.355. The phenformin therapy was replaced with NPH insulin and the patient was discharged in satisfactory condition.

Discussion

The lowest blood pH that has been reported¹ in the literature is 6.71. The two most common causes of low blood pH values are ketoacidosis and lactic acidosis in diabetic patients. Lactic acidosis has been observed in patients treated with phenformin.² Low blood pH may also be seen in some cases of attempted suicides by drug overdose. Simultaneous ingestion of nalidixic acid and probenecid³ for suicidal purpose, resulted in a blood pH value of 7.08.

When the blood pH is less than 7.20, sodium bicarbonate should be administered,^{4,5} and it is the drug of choice. Concomitant therapy with 10 to 30 or more units of regular insulin enhances the reversal of low blood pH.⁶ The dose of sodium bicarbonate is based on 30 to 50% of body weight of the patient, and according to the degree of bicarbonate deficit. With acute mild bicarbonate deficits of less than 10 meq/liter, a 30% bicarbonate space will provide an adequate correction. When moderate bicarbonate deficits range between 10 to 15 meq/liter, 40% of the body weight can be used. For severe bicarbonate deficits exceeding 15 meq/liter, the bicarbonate space should be considered equal to 50% of the body weight.

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Computations of the required dosage of bicarbonate is based on a normal blood value of 24 meq/liter. For example, a patient weighing 60 kg, with a bicarbonate concentration of 16 meq/liter, hence a base deficit of 8 meq/liter ($24 - 16 = 8$), we would consider a bicarbonate space of 30% or (0.30×60) 18 liters. Since the patient has a deficit of 8 meq/liter, he would have a total bicarbonate deficit of 144 meq ($8 \text{ meq/liter} \times 18 \text{ liters}$). Ordinarily, approximately one half of the deficit would be corrected initially. In this case, two 50 ml ampules of 7.5% sodium bicarbonate each containing 44.6 meq of bicarbonate may be used. It is administered intravenously over a period of 50 minutes. The patient then should be re-evaluated, further laboratory tests performed, and treated according to the degree of bicarbonate deficit. If alkalosis develops as a result of bicarbonate therapy, give 1% ammonium chloride solution, or 0.15 normal hydrochloric acid. When using hydrochloric acid, infuse slowly into a large vein at approximately 30 ml/hr.

Summary

In metabolic acidosis, where blood pH is less than 7.2, loss of respiratory center response to

lowered carbon dioxide content and increased hydrogen ion concentration may result. The use of sodium bicarbonate for management of diabetic ketosis and lactic acidosis has been controversial⁷ in the past, but it is now the treatment of choice.

Sodium bicarbonate is calculated according to the base deficit and infused slowly. It is used aggressively over a short period of time rather than over longer periods. Regular insulin 10 to 30 units is also given. The blood pH and carbon dioxide concentrations are determined every four to six hours and the therapy with sodium bicarbonate is discontinued when the pH exceeds 7.2.

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Spinal Cord Compression

F. ANTHONY GRECO, M.D., Editor

The subject today concerns an oncologic emergency—spinal cord compression. A systematic approach to the recognition and treatment of this neurological complication of neoplastic disease will be discussed.

Patient Presentations

RICHARD STECKLEY, M.D.:

Patient #1 was a 34-year-old white male who had been well until March of 1976 when he developed a flu-like syndrome. He was treated with three separate courses of antibiotics by his local physician and failed to respond. He was hospitalized in July of 1976, at which time he had a bronchoscopy revealing only diffuse inflammation. However, a cervical node biopsy revealed squamous cell carcinoma. He was transferred to Vanderbilt Hospital on July 15 complaining of severe dyspnea and an inability to swallow anything larger than a small pill. He had noticeable hoarseness and hemoptysis. He was tachypneic and diaphoretic. He had several large cervical nodes bilaterally. Mediastinal radiotherapy and dexamethasone were begun. Approximately 24 hours later he had the sudden onset of paralysis of both legs and a T₅ sensory level. An emergency myelogram was performed revealing extrinsic compression at T₅ and a laminectomy was performed revealing epidural focus of squamous cell carcinoma. Postoperatively he had persistent paralysis and incontinence. Two weeks later he suddenly developed hypotension with septic shock, and was treated with fluids and antibiotics. A flat and upright x-ray of his abdomen revealed free air and bowel perforation was suspected. He expired 12 hours later, and no autopsy was performed.

Patient #2 is a 45-year-old man who was well until January 1975, at which time he noted the onset of weakness and ataxia in his legs. Eleven months later, in December 1975, he saw a physician and a needle biopsy of a lytic lesion in his 10th thoracic vertebrae was done. Histologically it was initially felt to be eosinophilic granuloma. His weakness increased and a decompressive laminectomy with Harrington rod fixation was performed. Epidural tumor was identified as plasma cell myeloma. He received radiotherapy and had marked improvement. Bone marrow examinations in July 1976 revealed multiple myeloma. At that time he was started on cycles of Alkeran and Prednisone. He has done well since that time.

Review of X-Rays

JEREMY J. KAYE, M.D.:

Initial chest x-ray of the first patient shows an

infiltrate in the right mid-lung field. This is the only view we get in plain films of his upper thoracic region. The emergency lumbar myelogram was performed with a small amount of contrast demonstrating a complete block at the T₄₋₅ area. This is a very classical type of extradural block. In his postoperative course, you can see the clips outlining his laminectomy. He had bone metastasis as well. On multiple postoperative films a lytic lesion is noted in his right scapula. Shortly before his demise, he developed free air in the peritoneal cavity diagnostic of gastrointestinal perforation.

The second patient had a lytic lesion in the T₁₀ vertebrae. The diagnosis of eosinophilic granuloma was entertained initially. This is a diagnosis that I would not consider too seriously in a 45-year-old patient. His plain films show an extensive lytic lesion involving almost all the vertebral body. It has some surrounding sclerosis and there is a fairly prominent left-sided paraspinal mass. Based on this, the differential diagnosis would have included myeloma or plasmacytoma and metastatic carcinoma. Myelography reveals an extradural mass compressing the cord.

Discussion

F. ANTHONY GRECO, M.D.:

Spinal cord compression by neoplastic disease requires prompt recognition and therapy to avoid the catastrophe of permanent neurological dysfunction. Symptoms and signs may progress rapidly as in the first patient presented, or slowly as in the second patient.

The spinal cord extends to the L₁-L₂ vertebral level and is surrounded by the bony vertebral column. As with the brain, there is only little room for displacement and a very small mass can cause severe neurological dysfunction. Both benign and malignant tumors can compress the spinal cord and each has the potential of producing permanent neurological damage. Non-neoplastic lesions

can produce a similar clinical picture (Table 1). Therefore, the patient who presents with clinical findings suspicious of spinal cord compression should be evaluated carefully.

TABLE 1
DIFFERENTIAL DIAGNOSIS OF
NON-NEOPLASTIC LESIONS

Ruptured intervertebral disc
Trauma and fracture—dislocation
Hemorrhage from trauma, thrombocytopenia, or bleeding disorders
Epidural abscess
Myelopathy from previous radiation therapy
Transverse myelitis as a remote effect of cancer

Cord compression by tumors occurs from either intradural or extradural locations^{1,2} (Table 2). Intradural lesions arise either within the spinal cord (intramedullary) or surrounding it (extramedullary). These lesions represent approximately 50% of spinal cord tumors. Extradural tumors are usually malignant and metastatic, although there is a group arising primarily from the extradural space (lymphoma, sarcoma, myeloma, chloroma). Metastatic lesions to the extradural space are more common. Any primary tumor can be encountered but the most frequent are breast, lung, lymphoma, sarcoma and prostatic carcinoma. Invasion of the vertebral body usually occurs initially followed by involvement of the epidural space. Direct metastasis to the epidural space without clinically recognized vertebral involvement occurs less frequently.

TABLE 2
SPINAL NEOPLASMS

Location and Origin	% of all cases
INTRADURAL	
Intramedullary	22
Glioma	15
Vascular tumors	5
Others	2
Extramedullary	30
Meningioma	15
Neurofibroma	10
Congenital tumors	5
EXTRADURAL	48
Metastatic tumors	27
Sarcoma	7
Lymphoma	4
Myeloma, chloroma	5
Others	5

Pain is the most frequent symptom of cord compression and occurs in approximately 90% of patients.³ The pain is often localized to the area of the back or neck over the tumor, and may be radicular in character. Pain is often present for weeks to months before other neurological symp-

toms and signs. However, pain may not occur at all (approximately 10% of patients) or only shortly before paraplegia. Sensory and motor deficits usually occur together as segmental loss at the level of compression and dysfunction below the level of the lesion. The patient can rapidly or slowly develop weakness, decreased sensation, hyperreflexia, and bowel and bladder dysfunction.

The prognosis for recovery of neurological function is directly related to the degree and duration of neurologic impairment before therapeutic intervention.^{4,5} The earlier the diagnosis is made the more likely the treatment will be more effective. Therefore, physicians should maintain a high index of suspicion, particularly in patients with known malignancies. Since back pain is often an early symptom it should never be regarded lightly. Careful physical examination along with x-rays of the back and radionuclide bone scans are indicated. Approximately 90% of the patients will have bony lesions detected at the level of cord compression, while others will have no bony lesions found or multiple lesions along the spine. Lumbar myelography is the definitive test in determining if and where there is extradural block. It should be done as an emergency procedure in patients with neurologic symptoms or signs suspected to be secondary to spinal cord compression.

The patient's overall prognosis depends more on the type and total extent (stage) of the malignancy. Certain malignancies which cause spinal cord compression can be controlled for years or cured in some patients (Hodgkin's disease, histiocytic lymphoma, testicular carcinoma, Ewing's sarcoma, choriocarcinoma, Burkitt's lymphoma). Another large group of patients attain significant prolongation of useful life (breast carcinoma, soft tissue sarcoma in adults, some lymphomas, myeloma). Spinal cord dysfunction in these groups of patients can leave the patient paralyzed with no sensory, bladder, bowel, or sexual function yet their malignancy is controlled or perhaps cured. Rapid management often can effectively prevent these complications.

The treatment of spinal cord compression from malignant tumor is controversial. Randomized prospective clinical trials comparing the efficacy of surgical decompression (laminectomy) with radiotherapy and/or chemotherapy simply have not been done. Therefore, management is based upon individual experience, results in series of patients, and other clinical circumstances. Histori-

cally, treatment has been neurosurgical decompression or radiotherapy. Comparisons of some series of patients suggest that both therapies are equally effective.³ However, other series of results suggest neurosurgical therapy may be superior.⁴ Chemotherapy has a role in combination with radiation therapy or surgery in patients with more sensitive tumors, such as lymphomas or Ewing's sarcoma.

A reasonable therapeutic approach in patients with known malignancy is determined by the type of tumor, the time course of development and the severity and duration of neurological dysfunction. Patients with tumors which are very responsive to chemotherapy and radiotherapy can often be successfully managed if their neurologic symptoms are relatively stable. However, in any patient with a rapid deterioration the decision is often made to do laminectomy followed by radiotherapy and/or chemotherapy. Obviously, in patients without a known malignancy, laminectomy is both diagnostic and therapeutic.

Dr. Bolin, a radiotherapist, and Dr. Hester, a neurosurgeon, will give us some of their thoughts concerning this urgent oncologic complication.

MARION G. BOLIN, M.D.:

I would like to amplify Dr. Greco's remarks concerning spinal cord compression. This problem is not caused by a specific disease entity but is a clinical complex whose etiology can be from any one of several malignancies. Because of the many facets of this process, the management must often be individualized for each patient. Some of the factors to be considered are (1) the pathology of the primary tumor and responsiveness to different forms of therapy; (2) the time of development, either acute onset or a slow insidious process; (3) the presentation, in a patient with a known malignancy elsewhere or in a patient without a previous diagnosis of a malignant process. All of these different facets demand individualization of medical management.

Surgery has been the primary form of therapy since Dr. Horsley in 1887 first successfully removed a spinal cord tumor. In subsequent decades surgical approaches to spinal cord compression have been developed and refined. The philosophy of surgical treatment of spinal cord compression was plainly outlined by Elsberg in 1929 when he stated, "Whenever the diagnosis of compression of the spinal cord by an extramedullary new growth has been made, operative interfer-

ence should follow without more than the necessary delay."

In the 1950s and the '60s two additional modes of therapy became more refined—radiation therapy and chemotherapy. However, with few exceptions the surgical and medical literature consistently and primarily favored decompressive laminectomy and resection as the primary method of treatment. There was occasional use of radiation therapy and chemotherapy as postsurgical adjuvants. Even with the advent of modern equipment and technique, radiation was not considered the primary treatment for spinal cord compression for fear of causing swelling of the tissues and further cord damage. The problem of "radiation edema" is still used as an argument against radiation as a primary form of therapy in spinal cord compression. There is no good evidence that "radiation edema" of the spinal cord represents a major clinical problem. In the past, one method used to avoid so-called radiation edema was to start treatment with low daily dose fractions and gradually increase the daily fractions to 150 to 200 rads a day. Patients can be started at higher daily fractions in the range of 200 to 300 rads, and steroids can be used if necessary to control "edema."

I am not suggesting all cases of spinal cord compression be sent directly to radiation therapy. Let me go back to one of my opening remarks concerning individualization of therapy for each patient depending on a number of circumstances. Let us consider the sensitivity of the tumor to radiation. The term radiation sensitivity is here meant to describe the speed of reduction in tumor size. Radiosensitive tumors would include the lymphomas, multiple myeloma, seminomas, and many pediatric tumors. These tumors could be considered for primary treatment with radiation therapy as we expect a rapid reduction in tumor size with small dosages of radiation.

In contrast, there is a group of tumors commonly considered radioresistant, where the term radioresistant describes a tumor with a slow reduction in size. Representative tumors in this class include teratocarcinomas, prostatic carcinoma and renal carcinoma. Here a laminectomy should probably be the initial treatment and radiation therapy or chemotherapy used as a post-operative adjuvant.

There is a gray zone where the tumors are moderately radiosensitive, such as carcinoma of the breast and lung. In this situation, if the neu-

rological deficit is minor, indicating early cord compression, then radiation might be given and a laminectomy avoided. If the deficit is moderate to severe then surgical decompression is indicated.

As mentioned earlier there is also a group of patients who present with spinal cord compression who do not have a previous diagnosis of malignant disease. In this situation surgical laminectomy to relieve cord compression and also establish a definite pathological diagnosis would be the primary treatment of choice. Afterwards, the need for postoperative radiation therapy or chemotherapy can be considered.

In a recently reported series of 73 patients treated with radiation therapy for spinal cord compression from malignant lymphoma there was an overall good response in 55% of the patients.⁶ Of the patients treated with radiation therapy 20% had a partial response and 25% had no improvement. The majority of the patients in the latter group already had complete paralysis when treated or else for various reasons received dosages less than 2,500 rads.

Our recommendations for the primary radiation therapy in cases of spinal cord compression are high daily dosages in the range of 300 to 400 rads a day for approximately three doses and then a reduction in the daily amount to 200 to 300 rads. This total dosage should be to the range of 3,000 to 4,000 rads depending on the histological type of tumor.

We feel that those patients who present with spinal cord compression secondary to tumors which are generally considered to be radiosensitive and those which show signs of early compression should be considered for primary radiation therapy.

RAY W. HESTER, M.D.:

As has been mentioned, there are also non-neoplastic causes of spinal cord compression. A known tumor elsewhere, places a person in great jeopardy of having extradural metastasis from it, but other types of spinal cord compression should be considered as well.

I will echo what has already been said and agree with Dr. Greco and Dr. Bolin that these tumors are varied. Their growth rates differ and the response to various forms of treatment differ. I should like to develop how I feel about treatment of spinal cord compression. The patients can be divided into two types: those with acute

spinal cord compression and those with chronic cord compression. The development of the acute and chronic type is related to the growth rate of the tumor and the various vascular phenomena that are associated with spinal cord compression.

In our experience patients with extradural spinal cord compression and rapid progression of signs do not respond well to anything except immediate surgical decompression. If the decompression is delayed until all neurological function is lost, I know of only a rare patient who regained any significant function. The most critical point I need to make is that if we are going to do decompressive laminectomy it needs to be done for the rapidly progressing lesion as soon as possible, otherwise it is not really very helpful to the patient and in many cases just adds a burden to his future care.

In the case of chronic spinal cord compression, in which the symptoms are slowly progressive, workup can be carried out more carefully and tumor type can often be determined. A decision concerning laminectomy can then be made. In patients with lymphoma satisfactory results have been obtained with radiation therapy alone.

A laminectomy is not magical and is only one form of therapy. I feel that in those patients with radiosensitive or radiocurable tumors in which the neurological dysfunction is progressing at a slow rate, radiation therapy or chemotherapy probably should be tried prior to laminectomy. I also agree with the statement that radiation probably does not cause edema to any great extent and inadequate dose may be responsible for progression of neurological symptoms.

Many patients with extradural tumors complain of back pain. In patients with back pain who have known malignancy elsewhere, even with no neurological deficits, myelography should be considered. If the tumor is partially radiosensitive (for example, the lung or breast), I feel radiation therapy is indicated. It is important to find these tumors at this stage. Once the neurological deficit begins the tumor is larger and there will often be a complete myelographic block. The loss of neurological function is primarily from ischemia secondary to compression of spinal cord vasculature. Once rapid neurological progression has begun, it will often proceed to complete loss of function in spite of maximum treatment with radiation therapy and chemotherapy (this is probably related to vascular compression). The optimum time to find these tumors, whether they are

treated with surgical decompression or radiation, is before the development of any neurological signs.

Acute urinary retention is an important sign in patients with malignancies. This problem may be overlooked and regarded as secondary to bedrest and medications in the elderly. These patients should be evaluated immediately, and usually a myelogram is indicated.

In many patients who have decompressive laminectomy, extradural tumors are found to be anterior and lateral to the spinal cord. Manipulation of an already damaged spinal cord will often further add to the problem. Only as much tumor is removed as is practical and safe. Postoperative radiotherapy and chemotherapy are often indicated depending on the type of tumor.

The postoperative care of the patient with cord compression may represent a great problem, depending on how far the neurological dysfunction has progressed. Taking care of a paraplegic patient presents the problems of bladder dysfunction, loss of sensation and movement with associated bed sores, and recurrent urinary tract infection. The rehabilitation and continuing care of the patient requires paying attention to these details.

A physician:

I would like to ask Dr. Hester about the timing of therapy. For example, a patient on the medical

service has had a myelogram and a block is demonstrated. The patient has rather stable neurological deficits. What period of time do you feel is appropriate to allow signs to progress prior to surgical intervention?

Dr. Hester:

It is my feeling that immediate treatment should be instituted when a myelographic block is demonstrated. Now, I did not say laminectomy, but immediate treatment. I think that if you know it is a lymphoma or a similarly radiosensitive tumor and the neurological progression up to that point has been slow, then immediate treatment with radiation or chemotherapy or both is a satisfactory way to proceed. But any delay in starting treatment will probably cause you to regret it. I think that anytime there is a complete myelographic block some form of treatment should be instituted immediately unless the general medical condition of the patient is very poor and the decision is made not to treat at all.

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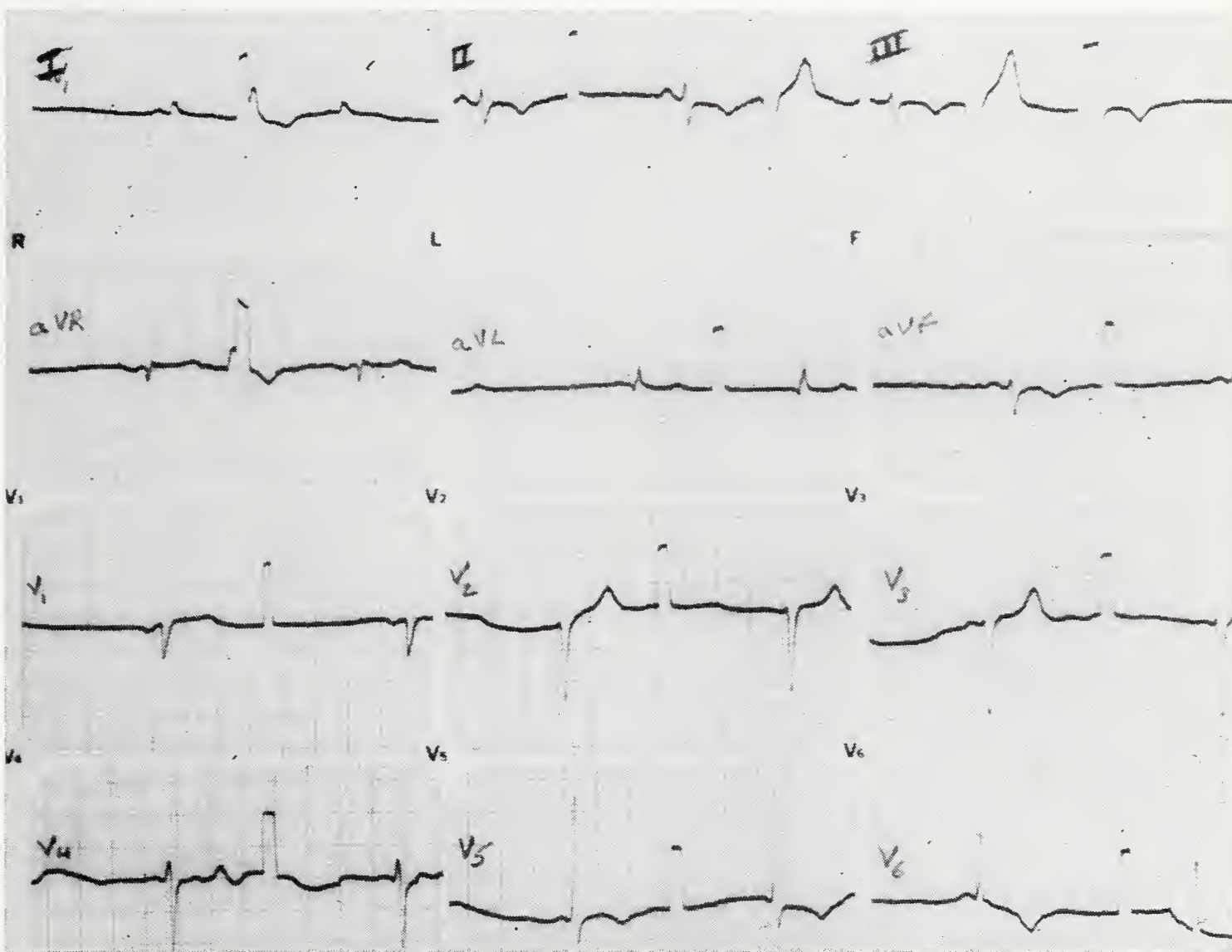


"Yes, I do feel a bypass is in order. Bypass the refrigerator, bypass the cupboard, bypass the pizza parlor."

W. BARTON CAMPBELL, M.D., Co-Director

A 34-year-old woman was seen for severe burning substernal pain which was unrelated to exertion. She had the pain intermittently for the preceding two to three years. Recently she had noted frequent palpitations. On clinical examination blood pressure was 122/80. She was noted to be an anxious white woman. On auscultation the first sound was followed by a systolic click. A Grade II short harsh systolic murmur immediately followed the click. With standing, the click moved closer to the first heart sound and the murmur became somewhat softer. With squatting the click moved into a later portion of systole and murmur became shorter but slightly louder. An electrocardiogram was obtained (Figure).

seen in the precordial leads V_1 through V_6 . Note the considerable variation in the R-R interval. The rate is slow at 40 to 50 per minute. Premature ventricular contractions are present. On occasion (standard lead I, standard lead III) these are interpolated. The QRS axis is leftward with more R wave in AVL than in lead I. There is also more prominent S wave than R wave in II. This finding displays counterclockwise rotation of the QRS forces with a mean axis leftward of 30° and is diagnostic of anterior hemiblock.¹ There



Discussion

The electrocardiogram shows periods of sinus bradycardia and sinus arrhythmia. This is best

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is poor R wave progression in V_1 through V_4 . The T waves are inverted in V_5 , V_6 , standard leads II, III and aVF. An echocardiogram showed prolapsing mitral valve.

Continued on page 576

Cushing's Syndrome

JOHN W. HOLLIFIELD, M.D.

The finding of centripetal obesity, hirsutism, diabetes, weakness and protein wasting in a hypertensive patient suggests the presence of excessive production or use of the adrenocortical hormone, cortisol. This constellation of symptoms is called Cushing's syndrome. Cortisol production by the adrenal glands is normally stimulated by adrenocorticotrophic hormone (ACTH) produced by the pituitary gland. A negative feedback system exists between plasma levels of cortisol and ACTH such that falling levels of plasma cortisol result in the release of ACTH from the pituitary causing a stimulation of cortisol production by the adrenal. As the level of cortisol rises the release of ACTH from the pituitary is diminished. ACTH release and hence, plasma cortisol levels, are highest in the early morning hours (4 am to 10 am) and the lowest at night (8 pm to 12 midnight). This diurnal rhythm in cortisol secretion is characteristic of the normal state but is not seen in patients with Cushing's syndrome.

Cushing's syndrome may be caused by primary adrenal disease, such as a tumor (either adenoma or carcinoma), or may be secondary to overproduction of ACTH by either the pituitary gland (called Cushing's *disease*) or by the production of ACTH-like polypeptides by nonendocrine tumors such as carcinoma of the lung. In both instances, it is the production of excessive cortisol by the adrenal which results in Cushing's *syndrome*.

The diagnosis of Cushing's syndrome, once suspected on clinical grounds, may be confirmed by demonstrating elevated urinary 17-OH corticoids or free cortisol and serum cortisol and alterations in the normal physiology of the adrenal-pituitary axis. Of particular diagnostic aid is the

demonstration that the normal diurnal variation in plasma cortisol is absent. The administration of a synthetic cortisol-like hormone, dexamethasone, will suppress pituitary ACTH in normal subjects and result in a decreased excretion of urinary and plasma hormones. However, in patients with Cushing's syndrome there is no decrease in these measurements. A simple screening test to separate patients who are normal from those with Cushing's syndrome involves the administration of dexamethasone 1.0 mg at midnight followed by collection of a serum cortisol at 8 o'clock the next morning. Patients with Cushing's syndrome fail to suppress their plasma cortisols to less than 7 μ g%. A certain percentage of normal patients will also fail to suppress with this test.

In order to confirm the presence of Cushing's syndrome a formal suppression test using 0.5 mg dexamethasone by mouth every six hours for 48 hours should be performed. Patients with normal adrenal function will show a fall in urinary 17-OH CS to less than 3.5 mg/24 hr while patients with Cushing's syndrome will show no significant suppression of urinary steroid excretion. Separation of patients with primary adrenal origin Cushing's syndrome or ectopic ACTH syndrome from those with Cushing's disease (pituitary origin) is accomplished by administration of larger doses of dexamethasone (2 mg by mouth every six hours for 48 hours). Patients with adrenal tumors will fail to suppress their cortisol excretion even on this high dose but patients with Cushing's disease will suppress their basal cortisol production by at least 50%.

Another helpful test to differentiate the various types of Cushing's syndrome is the ACTH stimulation test which involves administration of 40 to 50 units over eight hours. Normal subjects'

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adrenals will double their excretion of urinary hormones while patients with Cushing's disease due to ACTH excess will at least triple their levels of urinary hormone excretion and exhibit prolonged excess excretion for two to three days following ACTH stimulation. Patients with adrenal carcinoma will be unresponsive to ACTH stimulation and only half of the patients with adrenal adenomas will respond to ACTH administration.

Metyrapone, an inhibitor of adrenal 11β -hydroxylation may also be used to help differentiate patients with primary adrenal Cushing's syndrome from those with ACTH overproduction. Patients with pituitary ACTH excess respond to metyrapone by increasing their excretion of urinary 17-OH corticosteroids while patients with adrenal tumors (both adenoma and carcinoma) have either no response or a slight fall in urinary steroid excretion.

The principles of treating pituitary ACTH excess as a cause of Cushing's syndrome include (1) removal of pituitary tumor if present, (2) prevention of permanent hormonal deficiency state, (3) avoidance of therapeutic complications, and (4) treatment of existing complications.

The presence of pituitary tumors in patients with pituitary origin Cushing's syndrome or with Cushing's disease is rather low, being between 4% and 15% of patients who present with this disorder. However, if enlargement of the sella tursica is present, patients should be subjected to removal of that tumor, so that its subsequent growth does not impinge upon vital structures surrounding the sella tursica. For the majority of patients there is no gross evidence of pituitary tumor, although many are thought to have microadenomata which can sometimes be recognized by high resolution polytomography of the sella.

In the past a large percentage of patients with pituitary origin Cushing's syndrome have been subjected to bilateral adrenalectomy for their condition. It has been adequately demonstrated that unilateral adrenalectomy or one and one half adrenalectomy represents inadequate therapy for this condition because even if there is initial beneficial response with normalization of serum or urinary cortisol levels, the disease will recur with time because of the ability of excess ACTH production to stimulate the remaining adrenal tissue to produce large amounts of cortisol. For that reason these two techniques have been discarded and bilateral adrenalectomy has been a

standard mode of therapy for the last decade and a half.

This method of therapy for Cushing's disease does not satisfy a major principle of our therapeutic program. If bilateral adrenalectomy is performed it results in cure in virtually every patient upon whom it is performed; however, it leaves the patient also with a permanent hormonal deficiency state and a lifelong dependency upon glucocorticoid replacement therapy. In addition it deprives the body of aldosterone, the major salt-retaining hormone of man, and of adrenal medullary catecholamines. For this reason the initial treatment of Cushing's disease with bilateral adrenalectomy is not felt to be the most appropriate mode of therapy. Treatment of this disorder can best be accomplished either by transsphenoidal hypophysectomy with removal of microadenomata or through heavy particle irradiation (proton beam). This technique, performed only in Boston, Mass. and Berkeley, Cal., represents an acceptable cure rate for patients with pituitary origin Cushing's syndrome. Complications are relatively low, and a large percentage of patients have been shown to respond favorably to these techniques.

Conventional radiation for adults with Cushing's disease does not represent a reasonable form of therapy since the cure rate from this form of treatment is rather low. However, treatment with conventional radiation is an effective method of treating patients with childhood Cushing's syndrome.

For those patients who have partially treated Cushing's syndrome or those who represent particular operative risks, medical therapy with an adrenolytic agent (OP'DDD, an insecticide which destroys functioning adrenal tissue) may be instituted. Favorable responses to OP'DDD administration demonstrating significant falls in serum cortisol can be observed within three to four months following initiation of therapy with 2 to 5 gm daily. Adrenal enzyme inhibitors (metyrapone, aminoglutethimide, trilostane) are experimental modes of controlling cortisol excess on a temporary or palliative basis.

Treatment of existing complications of Cushing's disease, including renal calculi, hypertension, and diabetes mellitus, is often necessary prior to definitive treatment of the Cushing's disease and often represents the most difficult challenge in the management of the patient with Cushing's disease.

Lacrimal Gland Scan

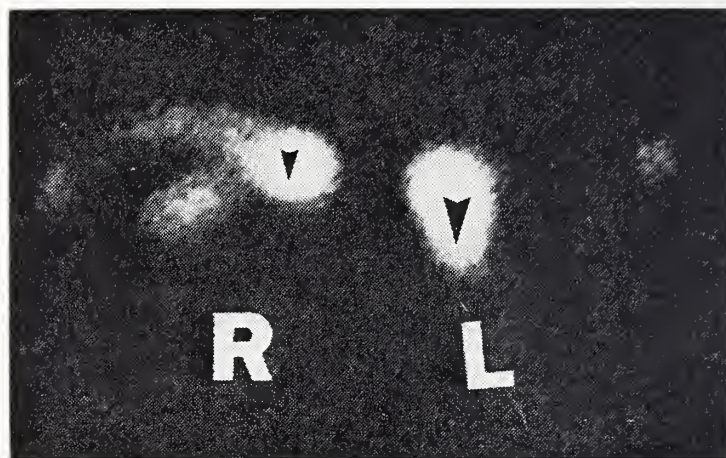
ROBERT L. BELL, M.D., and ROBERT R. HENDERSON, M.D.

This 20-year-old female had a six-month history of tearing, and a firm, painful 2 cm mass below the inner canthus of the right eye. This was treated by antibiotics but did not regress. The inferior punctum could not be probed and palpation gave no reflux. A radionuclide scan was performed by installing 1 drop of technetium (100 microcuries) in saline into each eye and photographing the passage of isotope into the lacrimal apparatus and then into the nose. The figure shows the passage after 20 minutes. The right eye (R) shows no passage beyond the lacrimal gland, while the left eye (L) shows passage into the nasopharyngeal region.

Surgery was performed and tannish chronic inflammatory material, which distended and occluded the lacrimal sac, was removed. A six-week follow-up showed normal drainage of tears from the right eye.

The lacrimal gland scan has the unique capability of allowing nontraumatic assessment of

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.



the patency of the lacrimal duct. The assessment is relatively physiological, and leads to a radiation dose that is only 2% of that which would be received by a normal radiograph. Often this assessment will help the ophthalmologist decide whether both eyes are involved in a process that blocks normal drainage of tears (i.e., Sjogren's disease, reaction to drug therapy, etc.), whether the block is in the nasolacrimal duct, and may help the ophthalmologist determine the type of surgery needed.

EKG of the Month . . .

Continued from page 573

Cardiac catheterization disclosed normal coronary vasculature and a vigorously contractile left ventricle with prolapse of the posterior leaflet of the mitral valve. Right heart pressures and cardiac output were normal. The patient has been treated with Inderal, potassium, quinidine or digitalis intermittently over the past three years and has continued to have frequent premature ventricular contractions. This constellation of asculatory findings with the electrocardiogram and echocardiogram represent the syndrome of pro-

lapse of the mitral valve as described by Barlow.²

Final EKG diagnosis: Sinus arrhythmia, sinus bradycardia, left axis deviation secondary to anterior hemiblock, frequent premature ventricular contractions, nonspecific T wave changes.

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Laboratory Investigation of Hemolytic Anemias

Part I

C. SOTELO-AVILA, M.D., and W.M. GOOCH, III, M.D.

Laboratory investigation of patients with hemolytic anemia (HA) requires adequate use and interpretation of laboratory examinations. Specific tests are often dictated by the results of examination of the patient's peripheral blood smear making, at such times, adherence to formal scheme of associated laboratory examination such as that cited below unnecessary. The essential feature to be understood in HA is shortened red cell survival, and the diagnosis of HA comprises, (1) recognition of anemia (if present) and increased hemolysis and, (2) the identification of the general and specific mechanisms of hemolysis. We recommend the following scheme of investigation, which covers the most important and practical tests, and to a certain extent, the sequence in which they should be ordered.

Recognition of Anemia

Complete hematologic examination should include the following:

1. *Hematocrit, hemoglobin determination and red blood cell count for indices.* Normocytic or macrocytic normochromic anemia is commonly present.
2. *Peripheral blood smear.* A careful and systematic examination of the peripheral blood smear is indicated; it often suggests the hemolytic mechanism involved, e.g., spherocytes, elliptocytes and target cells strongly suggest hereditary spherocytosis, hereditary elliptocytosis and hemoglobinopathies, respectively.

From the Departments of Pathology and Pediatrics, University of Tennessee Center for the Health Sciences of Memphis and Le Bonheur Children's Hospital, Memphis, TN 38103.

Schistocytes ("burr," helmet and triangular cells), irregular contracted cells and spherocytes are a constant feature in active intravascular hemolysis. Basophilic stippling suggests lead intoxication or thalassemia. Polychromatophilia, leukocytosis, and thrombocytosis are also frequently observed in HA.

3. *Reticulocyte count (RC).* This study is used in an assessment of marrow activity (effective erythropoiesis). In general, the more severe the anemia, the higher the RC. In the absence of acute blood loss or specific therapy for megaloblastic or iron deficiency anemia, moderate to marked reticulocytosis suggests HA. The RC must be related to the degree of anemia; it is expressed in absolute numbers (reticulocytes/cu mm) or in corrected percent by multiplying the observed percent by the ratio between the patient's hematocrit and the normal hematocrit (corrected reticulocyte count, CRC).

$$\text{CRC} = \text{RC (10\%)} \times \frac{\text{Patient's hematocrit (18\%)}}{\text{Normal hematocrit (45\%)}} = 4\%$$

Recognition of Hemolysis (Increased Hemoglobin Catabolism)

Laboratory findings depend on the site, amount, and rate of blood destruction. If massive intravascular hemolysis occurs, hemoglobinemia with hemoglobinuria, methemalbuminemia, and hemosiderinuria will be identified. In extravascular hemolysis, products of heme catabolism will be increased, i.e., bilirubin and fecal and urinary urobilinogen.

1. *Hemoglobin binding capacity of haptoglobin.*

Free hemoglobin (Hb) in the plasma is bound to haptoglobin (Hp). This Hb-Hp complex is removed from the circulation and catabolized by the reticuloendothelial system. Haptoglobin levels quickly fall in intravascular hemolysis; however, normal plasma Hp does not exclude hemolysis.

2. *Plasma hemoglobin.* Plasma hemoglobin concentration increases until after the Hb binding capacity of Hp is exceeded. Thereafter, levels decrease rapidly due to renal excretion and degradation into heme and globin. The presence of Hb in the plasma is a reliable sign of intravascular hemolysis.
3. *Urinary hemosiderin.* Part of the Hb is broken down in the renal tubular epithelium and iron is eliminated as hemosiderin. Hemosiderinuria is a reliable sign of clinically important chronic intravascular hemolysis.
4. *Serum bilirubin.* Serum bilirubin is slightly elevated, usually between 1 and 3 mg/dl, and consists primarily of the unconjugated fraction. Sometimes the level is normal despite marked hemolysis.
5. *Fecal and urinary urobilinogen.* In the absence of liver disease or antibiotic therapy, fecal urobilinogen is a reliable indicator of hemoglobin catabolism; consequently, increased amounts of this bile-derived fecal pigment are found in patients with HA. Urinary urobilinogen may or may not be increased.

Further Studies

1. *Red blood cell survival studies.* Differentiation between corpuscular and extracorporeal HA is best demonstrated by red cell survival studies. Estimation of the life span of red cells in vivo is useful in patients with mild hemolysis or HA of obscure etiology.
2. *Bone marrow aspiration and biopsy.* Erythroid hyperplasia is often observed in HA. Rarely aplastic crisis occurs; the reason for marrow failure is not known.

Identification of the General Mechanism of Hemolysis

Having determined the fact that hemolysis is present, additional investigation is required to identify the general mechanism of hemolysis involved. The immune nature of a HA is usually established by the antiglobulin (Coombs) test.

1. *Positive Direct Coombs (DC).* This test detects

red cell bound antibodies. A positive DC strongly suggests heteroimmune, isoimmune, or autoimmune hemolytic anemia (AIHA); however, a positive DC does not necessarily mean immunologic HA. Likewise, a negative DC does not exclude the diagnosis, but it strongly militates against it. In some patients with negative DC the immune nature of the hemolytic disorder can be inferred from the therapeutic response to steroids.

- a. *Cold agglutinins (CA).* These low titer and almost universal IgM antibodies have a temperature of reaction ranging from 0 to 20 C and have no pathologic significance. Occasionally, CA have a broader range—up to 37 C. CA are responsible for chronic cold agglutinin disease and acute transient HA after mycoplasma or viral infection. CA have blood group specificity usually for the I-i system, and anti-I is the most common antibody detected. Approximately one third of patients with infectious mononucleosis develop anti-i antibodies.
 - b. *Donath-Landsteiner (D-L) test for Paroxysmal Cold Hemoglobinuria Syndrome.* The D-L antibody is an IgG bithermal auto-hemolysin with anti-P specificity. It binds to red cells only at low temperatures (below 15 C) and fixes complement. Hemolysis occurs when the blood is subsequently warmed (complement activation), hence the term bithermal antibody. The syndrome is observed in congenital or late syphilis and acute viral infections; rarely, it is idiopathic.
 - c. *Antibody Identification.* Specificity of the antibody (isoantibody or autoantibody), whether bound to red cells or free, can be determined by different laboratory techniques including enzyme treatment of red cells, elution, cell panel agglutination and typing and genotyping the patient's red cells.
2. *Negative Direct Coombs.* With a negative DC, further laboratory determinations will be directed towards the characterization of the specific hemolytic mechanism already suggested by the laboratory determinations outlined above. Negative DC is consistently found in corpuscular hemolytic anemias. 

Part II will appear in the September issue of the JOURNAL.

STEPHEN L. GAMMILL, M.D.

The patient is a 55-year-old white female with gastrointestinal bleeding. On barium enema examination a colonic polyp was discovered in addition to an unsuspected mass in the left upper quadrant.

Please examine the three scans below and pick the best diagnosis. (The scans are oriented as though you are looking from the patient's feet toward her head, i.e., her left is on your right.)

1. Tumor of left lobe of the liver
2. Retroperitoneal tumor
3. Splenomegaly
4. Carcinoma of tail of pancreas

Discussion

In Figure 1, you can identify the pancreas as a straightened comma in the middle of the scan. Adjacent and posterior to the tail of the pancreas lies a mass that is radiolucent. Because the mass is less opaque than the pancreas, you may exclude pancreatic carcinoma.



FIG. 1

In Figure 2, a normal spleen may be seen lying against the lateral abdominal wall. The splenic artery is readily visible entering the hilum

From the Baptist Memorial Hospital, Memphis, TN 38146.



FIG. 2

and crossing the stomach medially. The stomach is mottled in appearance because it is filled with food and air. You can identify some bowel containing residual barium anterior and medial to the spleen. Other structures that you may recognize are the aorta adjacent and anterior to the spinal vertebral body, the inferior vena cava lateral to the aorta, the hepatic artery (the tortuous vessel anterior to the aorta) and the liver filling the right upper quadrant. Since the mass is not attached to the liver, the diagnosis of liver tumor may be eliminated.

In Figure 3, a scan cut 1.5 cm caudal to Figure 2, note that the mass extends to the level of the kidney and has displaced it anterolaterally. The renal arteries and/or veins are readily identifiable as they emanate from the renal hila. The mass measured minus 6 Hounsfield units, which is in the density range of fat. The preoperative diagnosis was lipomatous retroperitoneal tumor, probably liposarcoma. Left renal and celiac arteriograms were performed and the findings were consistent with a nonspecific mass either adrenal or periadrenal in location that extended to the diaphragm. At operation a large retroperitoneal lipomatous tumor was removed from the left upper quadrant. It was periadrenal and extended to the diaphragm. Pathologic diagnosis

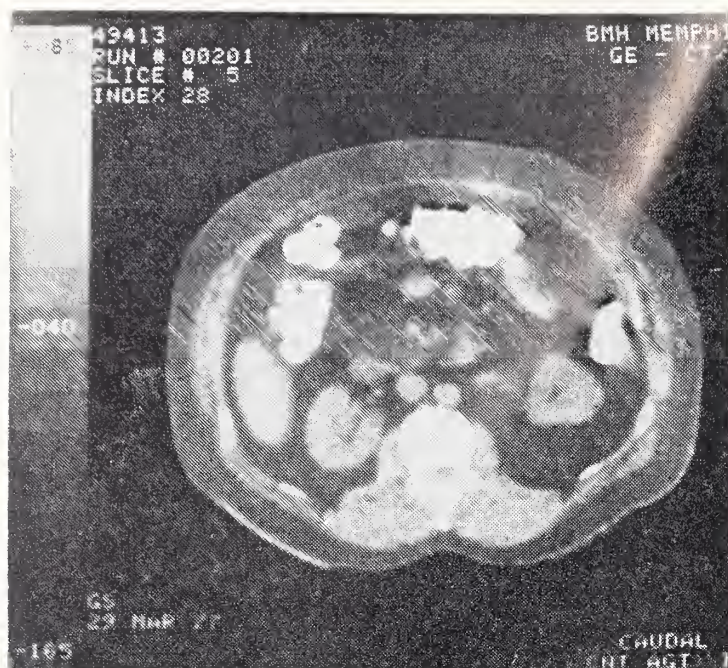


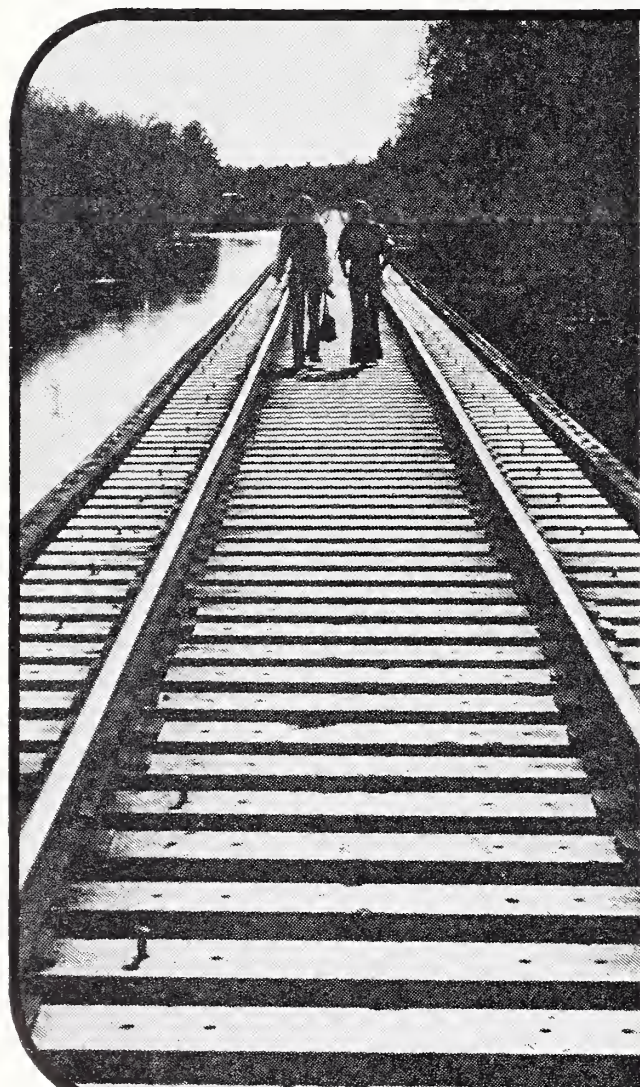
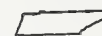
FIG. 3

was cellular lipoma. Incidentally, on review of plain abdominal films, we could detect no radiolucencies in the mass as one might expect to see in a lipoma. Apparently, resolution was not good enough to observe this finding.

As is apparent from these scans, computerized tomography of the body is opening new vistas in the diagnosis of abdominal lesions. When one considers that computerized tomograms of the body have been generally available for less than two years, and the quality of anatomical detail that can be demonstrated at present, future possibilities for diagnostic accuracy of abdominal diseases seems almost limitless. The future of diagnostic radiology certainly seems closely tied to the development of computerized tomography.

For the moment at least, it seems that CAT scanning of the abdomen will serve as a refined tool to add to the armamentarium of the diagnostic radiologist rather than a tool to replace existing diagnostic modalities such as excretory urography, gastrointestinal studies with barium, oral cholecystography, and arteriography. As computerized tomography becomes more sophisticated, however, it will probably replace some of the existing diagnostic procedures.

ANSWER: *Retroperitoneal tumor*



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Health-Related Bills Enacted in the First Session of the 90th General Assembly

Several measures were enacted by the first session of the 90th General Assembly that will have an effect on health care delivery in Tennessee. Several bills refer specifically to programs of the Department of Public Health. The following summaries describe major health-related bills enacted this session:

SB 208—HB 211 (Public Chapter 326) sponsored by Sen. Anna Bell Clement O'Brien and Rep. Mike Murphy, expands the scope of the state's newborn care program. Health professionals and concerned citizens are convinced that high risk infants need care extending throughout the pregnancy, delivery, and newborn periods; therefore, this bill provides for a program of perinatal care. Several sophisticated care centers have been established in the state, and a system of referral to the appropriate care level is planned. An appropriation of \$500,000 is included for expansion of the program. The cooperation and participation of Tennessee's physicians has contributed significantly to the development of newborn care, and will be necessary for the further development of the perinatal program.

SB 162—HB 245 (Public Chapter 128) sponsored by Sen. Gabe Talarico and Rep. Tommy Burnett, is the Vital Records Act of 1977. This bill is the first effort at modernizing Tennessee's laws dealing with vital records in more than 30 years. The administration of birth, death, marriage, and divorce records is important to all citizens, and this bill updates and clarifies procedures for issuing, recording, and storing these documents. The Office of Vital Records in the Department of Public Health has more than 8 million records on file and handles more than 200,000 new certifications each year. The various revisions in the 1977 bill are detailed and administrative in nature, but the changes are expected to enhance the integrity and efficiency of Tennessee's Vital Records System.

SB 205—HB 212 (Public Chapter 21) spon-

sored by Sen. O'Brien and Rep. Burnett, provides for authorization for the Department of Public Health to establish regulations for telecommunications in emergency medical services. The purpose of this bill is to assure a compatible and efficient system of communications among emergency medical personnel and hospitals so that accident victims and other emergency cases receive the best possible care promptly. The Department will be able to coordinate the purchase of compatible radio equipment and assign appropriate frequencies for communication.

HR 24 calls for a study by the House General Welfare Committee of a variety of health care issues including (1) various levels of nursing care in institutional settings, (2) the placement of mentally retarded patients in intermediate care facilities, (3) the utilization of the state's chest disease hospitals. The report of this study is expected before the second session of the General Assembly convenes early next year.

A related project, the Special Advisory Task Force on Medicaid established at Speaker McWherter's direction, will examine many phases of nursing home care, administration, and financing as well as other aspects of Tennessee's Medicaid program, during the next few months. These are complicated and critical issues that will require the best efforts of all branches of government, health care providers, and the public to arrive at realistic policy recommendations.

SB 57—HB 78 (Public Chapter 66) sponsored by Sen. Ernest Crouch and Rep. Pam Gaia, provides for the substitution of generic equivalents for certain drugs if the prescribing physician approves. This is designed as a cost-reduction effort for the consumer, and took effect June 1, 1977.

Also important to all departments of state government and the citizens to whom they relate is the principle of "sunset" legislation. The Tennessee version of this concept is found in **SB**

Continued on page 583

Let Me Climb Down, But Don't Push Me Off....

KENNETH YEARWOOD, M.D.

When I first began working at the Center as a staff physician, there were several changes which had already taken place, the significance of which I had not been told. I did not realize that the name of the facility had been changed from a "... Hospital and School" to a "... Developmental Center," in keeping with the new approach to the management of mental retardation. Nor did I realize that all these years I had been working in a traditional "Medical Model" and now had placed myself in a "Developmental Model." I felt better when I realized that I had been assigned to work in some units that were still supervised by the nursing service. However, a couple of years would see more changes and these too would follow the developmental model.

Within a few months I was placed in a group with other staff members destined to study a new system called "Goal Planning" where I began to learn what it meant to be part of an interdisciplinary team. This seemed like a good idea at the time. After all, my pediatric training had taught me to look not just at the acute illness but at the total person, including his emotional factors, potential growth and development, and even the family and home environment. My training had also taught me that the good doctor should manage and coordinate the efforts of the various people who become involved in the case. Here it was the same, but yet it was different. We were trying to coordinate our efforts, but a physician was not numbered among the team leaders selected. Some three years have passed now and the interdisciplinary team concept has not collapsed yet. There still have been no doctors to serve as team leaders either.

What is the role of the physician in this new

world where he works? Has he found his proper place? At times I doubt it. At times I see others trying not only to tell him what his place is, but trying to "put him in his place" as well. It was not too disruptive when our established tickler file that told us when to do our annual physical exams fell to a team decision that every discipline must do its annual evaluation to coincide with the resident's staffing date, but as old team leaders went and new team organization concepts came, some annual exams were done twice, while others were missed.

It was disconcerting when a fellow team member began to call a physician 30 years his senior by his last name only, having lost the respect that the title of "doctor" seems to have once had. And, oh the embarrassment of having our tardiness to the team meeting denounced with a flourish of fanfare as though the winning score had just been made at the homecoming game. If only we could explain that we had been in the emergency room suturing a resident. On one occasion we had to fight to keep our medical clinic from being replaced by a team member's new secretary. Where was our salvation? At last it came! The I.C.F.—M.R. standards required not the team leader, but the physician to certify the necessity for continued treatment of the residents, and thus all of our jobs are justified. And there was the young Behavior Therapist with a degree so new that he still had the box it came in. When the resident became aggressive, he ran for the closet and an aide called the doctor for a shot of Thorazine. Thank goodness for paperwork and temper tantrums!

These admittedly infrequent encounters demonstrate attitudes held by some of our co-workers which was illustrated by a cartoon I saw in a goal planning book showing the bewildered physician standing beside his vacated pedestal of

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

honor, looking up at his somewhat tarnished and crooked halo.

It is true that the formal training of most physicians presently working in the developmental centers preceded the concepts presently being used by the younger members of the other professions which now control the field of developmental disabilities. While some physicians would want to totally control the residents' management, others would be content to sit in their office and let the residents be brought to them for their runny noses and general checkups. These physicians have helped create the "Tarnished-Halo" syndrome.

The proper place for the physician should be up at the conference table and down at the resident's side along with his fellow team mem-

bers. He should be able not only to treat the medical problems, but to have a genuine interest in the resident as a total individual. A total acceptance of the physician by the rest of the team as well as an acceptance by the physician of the team concept is essential, whether it is trying to control seizures so that the resident can stay in the school program or consulting with psychology and recreation services to discuss potential benefits to decide if an orthopedic procedure should be done.

Certainly if allowed to do so, and perhaps with a little help, we can adequately define our proper position and function well in it. In the meantime, "Let me climb down, but don't push me off . . . for when I have fallen, I might not be able to stand up again." 

Public Health . . .

Continued from page 581

1085—HB 937 (Public Chapter 452).

This bill calls for the termination of most agencies of state government on a staggered basis, beginning with 1980. The speakers of each house are directed by the bill to appoint appropriate committees to conduct reviews and work with the necessary subcommittees to assist in evaluation of the agencies, boards, and commissions. The objectives of the evaluation include (1) determination of quality of programs and success in implementing legislative mandates, (2) continuation of successful and efficient entities and modification of entities to give more effective service to the public, (3) elimination of inactive entities, (4) elimination of duplicate entities, (5) elimination of ineffective, undesirable entities. Other factors to be considered in-

clude extent to which regulatory entities permit qualified applicants to serve the public, compliance with affirmative action requirements, public participation in rule-making, and the extent to which regulation increases costs of goods or services.

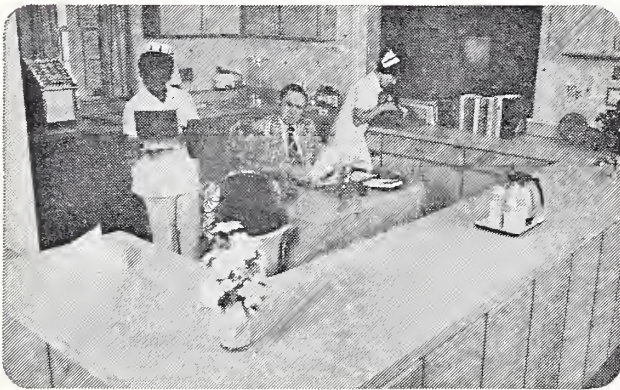
Also of interest is **SB 382—HB 300** (Public Chapter 114), sponsored by Sen. Ed Blank and Reps. John Bragg and Mike Murphy. This bill provides that a child under four years of age shall be protected by a safety restraint device or held in the arms of an older person when riding in a motor vehicle, with the exception of recreational vehicles. Proponents of this bill are hopeful that its observance will reduce the number fatalities related to traffic accidents among young children in Tennessee. 

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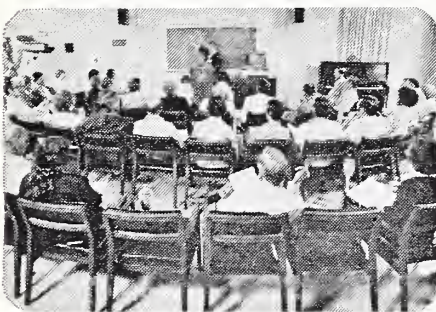
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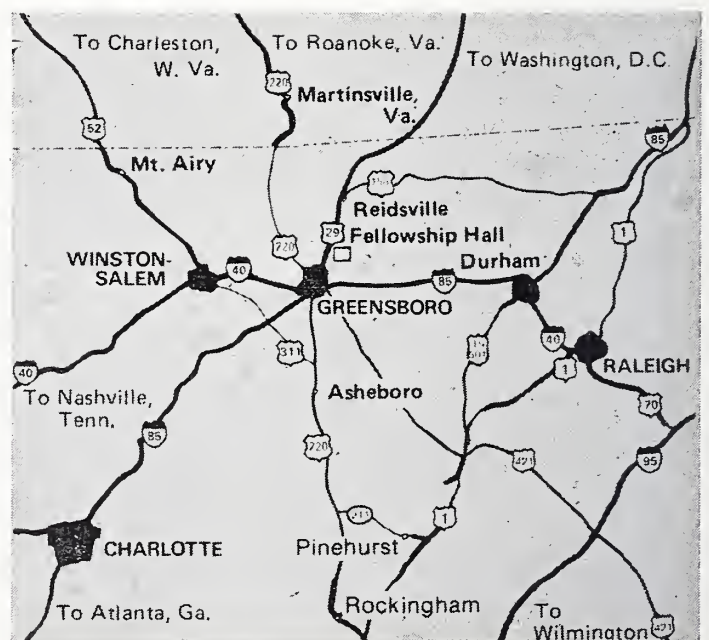
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Aging: A Challenge to Medicine

ROBERT N. BUTLER, M.D.

The health care system and other vital American institutions were not prepared for the demographic revolution of the 20th century that saw the population of older Americans grow sevenfold while the general population only tripled.

This human triumph of increased life expectancy is clouded by the situation created because the nation was not prepared for a "sudden" increase of citizens 65 and older—from 3 million in 1900 to 23 million today.

The major task before the nation is to adapt its social institutions to the needs of older people while, at the same time, it meets the needs of the younger population.

The prospect of the older population growing to 30 million by the year 2000 poses an especially serious challenge to the health care profession—from the "pure" research scientist in the laboratory to the practitioner in his consulting room.

The profession is ill-prepared to meet that challenge, as indicated by a lack of training in geriatric medicine—not even fundamental education in this field is offered by American schools of medicine.

A survey of 99 medical schools in 1970, for example, found that 50 made no mention of geriatrics in their offerings. And, of the nation's 114 medical schools, only 32 offer electives in the subject.

Until January of this year the nation in which one out of every ten citizens is 65 years of age and older had not a single endowed chair in geriatric medicine. Today, there is one—the Irving Sherwood Wright Professorship in Geriatrics at the New York Hospital-Cornell Medical Center in New York City.

Let us hope that establishment of that chair, by a \$1 million endowment from the Gladys and Roland Harriman Foundation, signals a new

academic emphasis and that the Wright Professorship is the first in a series of similar teaching and research positions to provide needed leadership in geriatrics throughout the country.

Medical education today is marked by serious shortcomings: No medical school requires that all its students receive part of their training within nursing homes, long-term care institutions, or in home-care programs. There are but two formal medical school training programs in geriatric medicine and very few centers in which any sort of training for research in clinical gerontology can be obtained. In other words, medical students get little or no sophisticated teaching regarding the medical problems of the elderly. This lack is reinforced by a prejudice toward the aged often displayed by teaching and practicing physicians.

The obvious conclusion is that the medical profession, as represented by its educational establishment, is not preparing itself to serve a rapidly growing population with special needs for health care that become more pressing every year.

There are indications that the general public is moving ahead of the medical profession in recognition of the special problems of the elderly and in taking action to solve them. Congress, as representative of the people, established the National Institute on Aging (NIA) as the 11th of the National Institutes of Health after finding that: "No American institution . . . has undertaken comprehensive systematic and intensive studies of the biomedical and behavioral aspects of aging and the related training of necessary personnel."—Research on Aging Act of 1974 (P.L. 93-296)

The Institute, which began operations last year, sees its main role as correcting this lack by supporting a comprehensive program of research and training on the variety of factors—biological, medical, social and behavioral—which contribute

From the National Institute on Aging, National Institutes of Health, Bethesda, MD., 20014.

to the aging process. This research program is intended to produce the knowledge needed to prevent, modify or reverse the harmful aspects of aging and enhance the quality of the later years.

Institute scientists are working to (1) distinguish aging from disease; (2) identify the normal biological changes that accompany aging; (3) understand the relationships between the aging process and the diseases related to advanced age; (4) determine the psychological and social phenomena that contribute to and accompany changes with age; and (5) develop the diagnostic, treatment and preventive procedures to apply this knowledge.

Research lies at the heart of solving such questions because, whether it is called basic or applied, research is the ultimate service. A comprehensive research plan was prepared by the Institute for the Department of Health, Education, and Welfare and presented to Congress, at its direction, earlier this year. The plan, entitled *Our Future Selves: A Research Plan Toward Understanding Aging* is designed to focus the resources of the government on all aspects of aging.

We recognize that research alone cannot accomplish the objective of a healthier and stronger older population, but the plan was offered as a reasonable and reasoned promise of a major endeavor to comprehend the nature of aging and its associated ills, with the ultimate aspiration of a more decent and dignified old age.

Far too many people, including professionals, see old age primarily as a time of chronic illness, failing mental abilities, dwindling bank accounts and stagnation. The vision of the plan extends beyond these concerns to the positive aspects of aging. Therefore, two basic ideas underlie the recommendations of the plan:

- Effective programs for the aged—whether medical or social, treatment or prevention—must be based on knowing which changes in the aged are intrinsic to the aging process and which are not.
- If we are able to prevent or lessen the impact of nonintrinsic factors in the decline of the aged, then we are left with a unique and more satisfying concept of what aging is or should be—a natural stage in human development leading to a gradual and peaceful end.

Through research, and with the support of medical schools and physicians, knowledge can be increased and applied to serve the elderly.

The readiness of the medical community to join in this effort was indicated by a survey of practicing physicians, reported in the AMA's *IMPACT* (September 1976), in which 75% of respondents answered affirmatively to the question: "Do M.D.s need special training in geriatrics?" Such training would, for example, make more physicians aware that in the later years multiple disorders are present as the body's protective mechanisms are compromised. Symptoms present differently in the old and the untrained clinician often misses the diagnoses:

- An older person with hyperthyroidism may appear apathetic, not hyperactive.
- Tuberculosis may proceed in silence.
- Appendicitis may occur without the characteristic abdominal tenderness at McBurney's point, without fever, and without an elevated white count.
- An older person may have a heart attack without chest pain and may instead appear confused, disoriented, and seem like the victim of a stroke.

In the area of drugs, most practitioners have at some time been distressed by the adverse and often paradoxical reactions and interactions that occur because of multiple drug use by older people. Even so, the classic Goodman and Gilman textbook does not even have the word "age" in its index. Beleaguered by many other demands, the Food and Drug Administration has never really concentrated on the special variables of age, despite our knowledge that with age and with the severity of disease, the impact and the acute and long-term toxicity of drugs is altered. We know far too little about the age- and disease-related effects of the 1,500 different drugs prescribed each year. For example:

- The dosage of the anticoagulant warfarin needs to be lessened when given to a person taking chloral hydrate.
- There is a greater risk of bleeding when heparin is administered to women.
- There appears to be a link between reserpine and breast cancer in women.
- Diazepam causes excessive drowsiness with age.

Learning more about various medications and their age-related effects is one type of basic research appropriate for the NIA. We need wise prescription guidelines in our work with older people, but first we need the scientific knowledge to enable us to develop such guidelines.

The special effect of diet on the condition of the elderly is not well enough understood. Nutrition has been shown to be the only environmental

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The Poisonous Climate of the Times — Malpractice, Litigation, and a Possible Solution

The hardworking reasonably successful doctor is a prime target for malpractice suits. He works hard, continues his education, and worries about his patients. He is particularly concerned about the bad result. We all have bad results. The truism aptly states that the doctor who has no bad results doesn't have much of a practice.

The bad result surfaces again when the doctor is served with a subpoena informing him he is being sued for a half million dollars. The list of charges may be completely unrelated to the factual treatment and results. It almost simulates blackmail, yet it is all very legal.

The anger, frustration, and self-examination is completed so the doctor says to himself, "If you can't stand the heat, get the hell out of the kitchen."

Many hours are spent by the doctor in consultation with attorneys, photocopying records, and discussion with colleagues. He is told by his attorney that the plaintiff attorney can present such a pitiful case to the judge and jury that an award will be given. The doctor, respecting the knowledge and experience of his attorney, agrees to settle out of court. This, again, seems to be a euphemism for blackmail.

Should the case come to court, the plaintiff's attorney can find no expert witness locally because there is no malpractice. The plaintiff attorney, under the old saw of "doctors sticking together," brings in a hired gun. The experienced hired gun can sway the jury and an award is given. This is almost white collar mugging.

The responsibilities of the ethical attorney come into focus. In the light of the recent increase in malpractice suits against doctors, there seems to have been renewed interest in the use of causes for *malicious prosecution* and for *abuse of process* as a defense and deterrent against bringing of the ill-founded suits.

There seems to be a feeling in certain circles that many malpractice actions are brought on a

wing and a prayer and, however ill-founded, for the sole purpose of trying to extort a settlement or compromise in favor of the plaintiff against the defendant doctor.

The essential elements of an action for *malicious prosecution* consist of (1) the institution of civil proceedings by or at the instance of the defendant patient; (2) the termination of such proceedings in plaintiff doctor's favor; (3) malice in instituting the proceedings; (4) want of probable cause for the proceedings; and (5) the suffering of injury or damage as a result of prosecution or proceedings. Thus, following these guidelines, defendant doctors have counterclaims in malpractice actions against both the plaintiff patient who is disgruntled with the results of the procedure or operation as well as counterclaims against the plaintiff's attorneys. As could be imagined, such a counterclaim is very useful as a device to focus in the plaintiff and plaintiff attorney's mind the gravity of the claims they have made against the defendant doctor.

Secondly, if the plaintiff patient and attorney persist in prosecution of their suit, there is still the very real possibility of the recovery of damages against both the plaintiff and his attorney if and when the suit against the doctor is terminated in his favor.

There seems to be some disagreement in the United States as to what degree of completion or termination of the patient's suit is necessary for cause of action for malicious prosecution. This is a question which turns on the individual facts of each case, and which conceivably could be answered in as many different ways as there are cases. It should be pointed out that a cause of action for *abuse of process* may also be used as a defense against malpractice actions. Abuse of process is distinguished from malicious prosecution in that even though the institution of the suit was lawful, with probable cause and without maliciousness, there is an abuse of the process,

i.e., the lawsuit, in a manner not contemplated by law, or to obtain an object which such a process is not intended by law to effect. For example, vexing a defendant doctor to such an extent that settlement, though underserved and unwarranted, appears to be the path of least resistance with the least harmful effect.

In addition, it violates an attorney's code of ethics in bringing a suit solely for the purpose of harassing or vexing a defendant. However, as a practical matter, this is a claim very hard to sustain since it is a claim and area on which reasonable minds could differ very radically.

There is no reasonable approach to this. A doctors' civil liberties plan might be devised. Certainly our civil liberties are being encroached upon, if nothing else. If 500 interested doctors would donate \$200 yearly for membership, a

doctors' civil liberties plan would have a nest egg of \$100,000 for the state of Tennessee. Any malpractice suit involving a member could be studied by a voluntary committee. If it is in any way lacking in merit, the doctors' civil liberties attorney would countersue both plaintiff and attorney.

The harassment of these suits check-reins the experienced doctor's options for the individual patient. The time-consuming defense takes the doctor from his much needed work. Medicine, in general, gets a black eye from the media under the assumption of "where there is smoke, there is fire." It is about time we cleared the air of this pollution.

Joseph G. Burd, M.D.
313 Mid-State Medical Center
Nashville, TN 37203

Special Item . . .

Continued from page 586

factor to increase the life span in animal model systems. Unfortunately, the nutritional status of aged persons is often poor. Undernutrition can be the key to an array of pathologies, such as intellectual confusion (so-called senility), and anemia, which could be reversed if adequate nutrition were provided. However, what constitutes "adequate nutrition" for aged persons is not fully known.

Most information on nutritional needs is based on research with children and young adults. But, because of changes in the physiology of the aged,

such information is not likely to be applicable to the needs of this group. It would be of tremendous benefit to the aged to have valid guidelines for their nutritional requirements, including the need for vitamins, trace elements, fats, carbohydrates, and proteins.

The Institute actively seeks the support of the medical community and public and private agencies to increase the total resources available to accomplish its research goals and to bring the old into the mainstream of American medicine.



DAVID H. TURNER

president's page

Action or Apathy?

One year from now registered voters all over our nation will be in the midst of casting their ballots for selected political candidates of 1978. Tennesseans will have the responsibility of electing a governor, a U. S. senator, 8 congressmen, a public service commissioner, 16 state senators, and 99 state representatives.

As a physician or a spouse of a physician, you have the unique opportunity to join an organization that will be of great benefit to you when it comes to casting your ballot on election day. That organization is IMPACT—Independent Medicine's Political Action Committee-Tennessee. IMPACT's board of directors and staff work diligently to seek out political candidates, screen announced candidates and, finally, through physician leaders like yourself in the local community, decide who the best candidate is to represent you and your patients. IMPACT, duly registered under the Federal Election Campaign Laws and the State Campaign Financial Disclosure Act, contributes money to selected political candidates and their campaign committees. Also, IMPACT members work with their candidates to form candidate support committees and help their candidate in any way possible. IMPACT needs full participation by physicians and their spouses to continue to be a dominant force in the Tennessee and national political scene. Dues of \$25 include membership in AMPAC—American Medical Political Action Committee. Sustaining membership is available at \$65 with your spouse's membership available as "Partners in Politics" at \$15.

AMPAC statistics for 1976 show Tennessee ranked in the "Top Ten" nationally in selected categories, including percentage of total AMPAC members in the sustaining membership category—an excellent indicator of Tennessee physicians' awareness of the importance of their contribution.

Tennessee was one of 19 states receiving recognition from AMPAC this year at the AMA Convention in San Francisco for having its entire state medical association leadership sustaining members of AMPAC (leadership includes TMA president, president-elect, IMPACT chairman, AMA delegates, and alternate delegates).

With 1978 on the horizon and already candidates formalizing their campaigns, we as physicians cannot balk at our responsibility to our state and our patients. We have seen already in some instances what political action can do when we are on the other end—our apathy is our worst enemy. If we involve ourselves early, politicians can easily see our willingness to commit ourselves to selected candidates. *Soon* candidates will be seeking us out rather than our joining their camp.

With TMA membership beyond the 4,000 mark it is alarming to note that fewer than 50% of TMA physician members have joined IMPACT in 1977. Remember that IMPACT was organized by physicians specifically to carry out those political functions that our association is not allowed to do. IMPACT is *YOUR* political arm and voice!

As a past member of the board of directors and chairman of IMPACT, I personally solicit your support. Join with us to help elect responsible, honorable leadership for our state and country—leadership that is concerned and aware of Tennessee's and America's health needs with an overall hope for better government.

Sincerely,

David H. Turner, M.D.

PRESIDENT

P.S. On page 607 of this JOURNAL is further information on how you can join IMPACT. How well Medicine's voice is heard, depends on how much we support IMPACT.

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AUGUST, 1977

editorials

Fidgiting at the Fairmont

I understand San Francisco is a good place to have a convention, but I can only second a statement made on the floor of the AMA House of Delegates, in session in that city, to the effect that it didn't make much difference to him where they met, as he didn't see much except the inside of two or three hotels. It was interesting for the wives, and for the many members and physician

guests who came for the very fine education program. For the delegates and those others of us interested in the political aspects of American medicine, though, it was the same old sixes and sevens. Your ability to practice medicine relatively unhampered is due directly to the fact that some of your colleagues are willing to become involved in medical politics, as well as in the broader aspects of politics.

As usual, the House made some notable pronouncements, failed to speak in some critical areas, and actually even accomplished a few things. There was the usual excess verbiage, and the replowing of sterile ground, but by and large it seemed a satisfactory meeting.

"The *independence and antonomy of the State Medical Associations* is well recognized and clearly understood by those within the medical profession," says the preamble of a report from the Council on Constitution and Bylaws, "but occasionally those outside of medicine view the State Medical Associations as 'branches' or 'chartered chapters' of the AMA." The report affirms for those who do not know it that "participation of a State Medical Association in the House of Delegates is voluntary," and that "the Constitution, the Bylaws, and the actions of the Association do not bind a State Medical Association or subject it to any obligation it does not voluntarily assume."

I mention this because I am not so sure the first part of the preamble is accurate. I think there are many physicians who do not understand this, and it is most important.

Representation in the House of Delegates by specialty societies, and indeed the whole matter of the relationship of specialty societies and the AMA, came under scrutiny, and engendered some of the most heated debate in the entire session. It is critical for American medicine that all physicians be properly represented, or the AMA loses any semblance of a united voice, which is becoming more and more necessary even as it becomes increasingly difficult to achieve. Each specialty has its own particular problems, and some of the specialty societies, particularly the American Association of Family Practice, the American Society of Internal Medicine, and the American College of Surgeons, have nearly as many members as the AMA. But it becomes increasingly apparent that if medicine is to survive the onslaught of government, labor, and now even industry, there must be a voice

of American medicine generally, a voice which only the AMA can provide.

For this reason the AMA House of Delegates and Board of Trustees see adequate specialty representation as vital. This representation has up to the present been accomplished through specialty sections, each of which has had a seat in the House. The sections have representatives from the various specialty societies. A proposal by the Board would have given direct representation in the House of most specialty societies, which would have had the effect of abolishing the specialty sections. Some of the smaller societies saw themselves being disfranchised, and the specialties saw their input into the scientific programs and scientific exhibits terminated or at least severely curtailed, and so the House sent the proposal back to the Board and the Council on Long Range Planning and Development (where the recommendations originated) with the recommendation that increased specialty representation be accomplished without dismantling the present structure. But most importantly, the House unanimously approved the concept of increased specialty representation as a mode of strengthening the Association.

In pursuit of its goal to be truly representative of the nation's doctors, the AMA continues to broaden its base, as evidenced not only by the effort to increase representation by the specialty societies, but by increased academic, resident, and student activity. The newly constituted Section on Medical Schools elected and seated its first delegate, representing the administrations of more than 80 medical schools. The Intern and Resident Section came very close to electing their candidate, a very able resident in plastic surgery and the holder of a law degree, to the Board of Trustees. Both the Intern and Resident Section and the Student Business Session were well represented, not by the shouting long-haired, jean-clad element which a few years back threatened to disrupt the House sessions, but by a group dedicated to earning their right to be heard by serious efforts to work together with their elders toward the improvement of the medical climate for the betterment of all our patients.

There has been concern over the past few years about the diminishing numbers of attendees at the *scientific sessions* (though there was a marked increase at this meeting—but San Francisco is not St. Louis). Those members with official responsibilities have made up the bulk

of those present at recent meetings, and they have little opportunity for anything else. It was decided last year to hold the winter meeting of the House each year in Chicago, followed by the Annual Scientific Session elsewhere (this year in Miami). A report on *conventions* was adopted in San Francisco which opens the way for doing away with the scientific portion of the Annual Meeting, so that if proposed amendments to the Constitution and Bylaws to that effect are adopted at the Annual Meeting next year in St. Louis, as it is presumed they will be, the educational efforts of the AMA will be concentrated in the Winter Scientific Session and in the regional meetings, which have been highly successful.

There was the usual bickering in the House and its reference committee over *National Health Insurance*, and a glut of resolutions flooded the market, but the final result was a reaffirmation of support of the AMA's previously adopted stand and its comprehensive health care bill, which has previously been extensively reported on in these pages and elsewhere.

The matter of *cost containment* came in for a close look, with an interim report from the National Commission on the Cost of Medical Care, established by the Board in 1975. Its final report is expected to be completed in January 1978, and will fill three volumes: (1) a historical overview and the options and recommendations of the commission and of its task forces on supply, demand, marketplace and technology; (2) review of staff written literature; and (3) a compilation of requested formal papers, numbering about 20, which have been or will be presented before the entire commission.

The topic was also addressed at length in the opening session of the House by the secretary of the U.S. Department of Health, Education, and Welfare, Joseph Califano. It was heralded as a major policy address, and was delivered before a packed house, but I found it singularly lacking in content. There were the usual barbs thrown at the AMA in general and EVP Jim Sammons in particular. It was the same old party line which you can read in almost any newspaper. It is fully reported in the *AM News*, and I won't belabor the issue except to say that Dr. Sammons responded with a well-aimed and effective blast of his own. He, along with outgoing President Dick Palmer, called for greater unity among the medical profession in dealing with the incursions of government and others against our individ-

ualism. "This house of medicine must not be divided," said Sammons, if it is to overcome the "cancerous, restless, mindless blob of a force" that is the federal bureaucracy. We are "in a war," said President Palmer, "to protect the overall quality and sufficiency of medical care," a war against "the outrageous concept that health care is a public utility."

You would be well advised to read the June 27/July 4 issue of the *AM News* from cover to cover and to digest it thoroughly. What I can put in this editorial is only a capsule of impressions of some—not by any means all—of the things I thought important. A few more brief items:

The *saccharin* controversy brought a surprising amount of conversation, both on the House floor and in reference committee, leading to the recommendation that saccharin be put back on the shelves, as there is no proof, or even any good evidence, that the amounts of saccharin used as a food additive produces cancer. "I only hope my diabetic patients live long enough to get cancer of the bladder from saccharin," opined one delegate, speaking against the ban.

The House stopped short of following the reference committee's recommendation that *Lae-trile* be declared simply a "substance" and be sold freely in the marketplace—on grocery shelves, to anyone who wants it—thereby removing the profit motive, which is primarily responsible for the present problem. What the House did was to declare it "a substance with no proven value as a drug." Several substitute resolutions calling for the AMA to adopt various positions in relationship to the drug were referred to the Board.

Finally, a report by the Judicial Council on the matter of *terminal illness and the right to die*, referred to it at the 1976 Annual Meeting, was adopted by the House. In it, the Council reaffirmed the stand taken previously by the House (at the 1976 Annual and Clinical Sessions) that a statutory definition of death is both unnecessary and undesirable, and that its establishment rest on clinical judgment.

The House previously also took the stand that "the cessation or the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family," with the "availability of the advice and judgment of the physician." This

has been repeatedly reaffirmed, and the report does so again. But it further addresses the matter of euthanasia and the handling of terminal illness, particularly in view of recent decisions in the New Jersey Supreme Court and the California State Assembly which indicate that the courts and legislatures may not be the best places to seek the answers to such questions.

Because both parties in the Quinlan case (New Jersey) declined to seek review by the U.S. Supreme Court, there still is no established national precedent to provide specific guidelines or rules concerning the use of emergency life saving or life prolonging procedures in terminal cases. The decision to use or not to use them is one for which the individual physician is likely to be held responsible, and each case will have to be decided on its merits (this issue is addressed by Dr. Kampmeier in our "Mail Box"). The California Natural Death Act also is of little help, except to state that it does not "condone, authorize, or approve mercy killing." There is little in the act which is likely to aid the physician in caring for the individual case.

To offer guidelines for courts and legislatures, which the Council recognizes it cannot direct, and which are unlikely to heed its admonitions, the previously adopted AMA policy is restated, with the addition of two other statements, forming what is, by action of the House, AMA policy:

- (1) The intentional termination of the life of one human being by another—mercy killing or euthanasia—is contrary to public policy, medical tradition, and the most fundamental measures of human value and worth.
- (2) The cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family and/or his lawful representative, acting in the patient's best interest.
- (3) The advice and judgment of the physician or physicians involved should be readily available to the patient and/or his immediate family and/or his lawful representative in all such situations.
- (4) No physician, other licensed health care providers, or hospital should be civilly or criminally liable for taking any action pursuant to these guidelines, nor should there be any criminal or civil penalties

of any sort imposed for conduct pursuant to these guidelines.

- (5) Except as stated above, all matters not in the public domain relating to a patient's terminal illness are the private right of the patient and are protected from public scrutiny by the privacy and confidentiality of the physician-patient relationship.

These last two statements, if accepted by the courts and legislatures in their deliberations, should allow for unhampered exercise of clinical judgment on the part of the physician to advise, and to carry out the wishes of, the patient and his family, as set forth in the first three statements.

J.B.T.

The Moon on the Door

There have been a few occasions during my lifetime when I have viewed the outside world through the moon on the door, but these times have been mercifully few. It was a cold experience in winter and a hot and smelly one in summer. Old Sears Roebuck catalogs served a dual purpose, though they generally just added to the discomfort. I have always thought my colleagues mostly shared my lack of extensive experience in this area. But sometimes I wonder.

Maybe I expect too much, but I have the feeling that if some doctors treated their homes the way they treat doctors' lounges, or acted at home as they do in the hospital, they would not be well received there—if at all.

At the moment one of the urinals in the hospital where I work contains two cigarette butts (yesterday there was only one). Only the filters remain, and I am timing it to see how long it will be before "Housekeeping" removes them. There is also a strip of plastic there. Not long ago I watched one of my colleagues casually toss a wadded paper towel into the commode. I started to say something, but thought, what the hell—I'll wait and write an editorial. Plastic coffee cups and empty cold drink cans usually litter the tables, often on top of or covered by unbelievably scattered newspaper, even though trash cans may be only two or three feet away. Housekeeping has a hard time keeping the carpet clear of crumbs.

So here's the editorial. The punch line is: all of you who were raised in a barn, keep looking

at the world through the moon on the door. But the Sears pages won't flush.

J.B.T.

Keep Tennessee Blooming; Protect Our Children

In the late summer of 1948 an epidemic of poliomyelitis was raging on the eastern seaboard, and North Carolina was particularly hard hit. A family from North Carolina showed up at the resort where my wife and I were vacationing with our 3-year-old child, and within 24 hours nearly every family with children had checked out. In 1941, when I was a first year medical student, an epidemic in Nashville took the life of one of my fraternity brothers. Almost everyone in my generation can tell similar stories of their own.

During my medical student and intern days there was always a case or two of tetanus around; every winter brought a few cases of diphtheria. Measles encephalitis, sometimes resulting in deafness or worse, was all too common.

Immunization procedures developed in the forties and early fifties changed all that, and we have now produced a generation of young parents, not to mention physicians, who are ignorant of the toll infectious diseases can take. They know all about what cancer can do, but infectious diseases are mostly a thing of the past in this country. Or they have been.

And they still should be; but recently they have been rearing their ugly heads again. The reason: ignorance and complacency.

Until the last few years no child could enter school without evidence of successful smallpox vaccination. The fight against smallpox has been so successful worldwide that smallpox has been virtually eradicated except for a few foci in Somalia, and vaccination is no longer considered to be necessary. I hope we will never live to regret that decision. Diphtheria and pertussis, both of which I had as a child, have ceased to be a threat, and in World War II, thanks to an effective toxoid, only four cases of tetanus, the scourge of the wounded in previous wars, occurred in properly immunized personnel out of nearly 3 million wounded and injured. The number of cases of paralytic poliomyelitis has decreased from around 20,000 a year in the fifties to fewer than 10 a year, and measles cases have fallen from over 500,000 cases in 1963, the year before the measles vaccine, to less than 50,000 in recent

years. Rubella has shown a similar decline since 1969, the year that vaccine was licensed.

The year 1976 saw a nationwide increase in cases of measles, and in Tennessee the 191 cases represented a 16% increase over the 1975 figure, and a three-fold increase over 1974. It appears the 1977 figure will be considerably higher, as the first 18 weeks of this year showed a 51% increase nationally (30,000 cases) over 1976, and a 93% increase over the median for the past five years. Only 43 million children are presently immunized against measles. At one time, 88% of our children were immunized against poliomyelitis. This has presently fallen to 63%, and there has been a similar decline in those immunized against tetanus.

Responding to this threat, the AMA adopted a resolution at the Annual Meeting just past that the medical profession give immediate priority to the establishment of a national immunization program in which all U.S. children would be immunized against all preventable infectious diseases. It was further recommended that provision be made "for a sustained multimedia promotional campaign designed to educate and motivate the medical profession and the public to expect and demand routine immunizations for children and show responsibility for their completion."

It's a serious situation, folks, when there are means at hand to wipe out most of the infectious diseases of childhood, and we let it slip through our grasp through sheer apathy. School will be starting soon, and there have been suggestions that immunizations be required for entrance. Perhaps, as some suggest, this is an infringement on individual rights, though if a child starts an epidemic it seems to me there have been a lot of other individual rights infringed upon.

But no matter. We have the means, and we must follow through with education—with insistence.

J.B.T.

Consider the Ant—

Go to the ant, thou sluggard;
Consider her ways, and be wise.

Proverbs 6:6

I got a piece of junk mail the other day which I was about to "file" when my eye was arrested by the bold print across the envelope, which said, "Why SOB's succeed and nice guys fail in a small business." Being naturally curious, I had to open the letter and see why, and I found the

words to be the title of a book being promoted. The gist of the letter is summed up in its first sentence: "If your competitors, your employees, your suppliers and your local bureaucrats are calling you a no good SOB behind your back, you are probably running a very successful enterprise. If they are calling you a nice guy, a great boss, and a fine customer, you are probably getting [the business]." The book tells you how to do it unto others before they can do it unto you.

Lewis Thomas, M.D., my favorite Biology Watcher, has had a couple of pieces in the *New England Journal of Medicine* in the past few months in which he has considered among other things the ant.

Everyone says, stay away from ants. They have no lessons for us; they are crazy little instruments, inhuman, incapable of controlling themselves, lacking manners, lacking souls. When they are massed together, all touching, exchanging bits of information held in their jaws like memoranda, they become a single animal. Look out for that. It is debasement, a loss of individuality, a violation of human nature, an unnatural act.

Sometimes, people argue this point of view seriously and with deep thought. Be individuals, solitary and selfish, is the message. Altruism, a jargon word for what used to be called love, is worse than weakness: it is sin, a violation of nature. Be separate. Do not be a social animal.

Do you get feelings of *deja vu* as you read that? I did (or rather, I read that first, and got feelings of *deja vu* when I saw the letter). But no matter. That message is, among other things, the father of Watergate. It comes from the Father of Lies.

The Book of Proverbs is said to have been written by King Solomon, the wisest of the kings of Israel (though he wasn't always so smart—he had 3,000 wives). He may have collected them, but they are maxims from the fathers, representing the best of ancient Jewish thought. We are advised to learn from the ant and be wise. But then that advice is several thousand years old, and we're too smart to be taken in by that.

What, after all, is the purpose of life? We as doctors possibly more than anyone else need to come to grips with that question. Perhaps there is no purpose at all. If there is not, and if man and the beautiful creation he lives in and is a part of is only an accident in a mindless cosmos, then man was not *meant* to do anything or to be anything, and he can go about self-gratification in any way he chooses. So if

pushing ahead by being an SOB turns you on, do it. If you would rather be useful, and altruism turns you on, do that. Whatever turns you on. . . .

But if there is a purpose, it is not the chaos that kind of individualism will produce. Civilization can absorb a few individuals like that. But if everyone buys that book, and acts on it, the result will be anarchy. If man really is meant to be anything at all, it is not an "SOB." "It is almost safe to assert, on scientific grounds," says Thomas, "that altruism would have to exist as a general principle, if a system so dense and at the same time so immense, containing such a stupendous variety of coexisting forms of life, were to have any sort of permanent existence as the life of the earth, as it plainly does. If all the components were continually locked in combat, red in tooth and claw, struggling to edge each other off the planet, bent on survival by extermination, the place would be a shambles, and it is not."

Well, so far it is not. God's lesser beings act on instinct. Man was given the right to choose, and taken on balance, he pretty much chooses wrong, because he listens to the wrong voice. The apple is "a delight to the eyes and good to eat." It's a lot more "with it" than that still small voice within, which more and more tends to be drowned out. I have a feeling a book like the one advertised might permanently silence it.

I know the world has been "going to the dogs" in the view of the sages in every generation for millenia, and perhaps it's no more hell-bent now than previously. But this is the generation in which we live, so it's closer, and it impinges more on us. And anyhow, we can do nothing about the others. Maybe we can't do anything about this one either. But we have a choice to make, and to make no choice at all is to reject the "still small voice within," for if we choose not to listen, it will go silent—permanently.

To be called "a nice guy, a great boss, and a fine customer" is no more a proper ambition than to be called a "no good SOB." To be altruistic, translated loving and helpful, is. This is what the ant is by instinct. For the sake of the world, for the sake of our patients, and, the advice of the ad notwithstanding, for the sake of ourselves, "consider her ways, and be wise."

J.B.T.

Footnotes

There are a couple of items in the JOURNAL this

month which you might overlook and which merit your attention, as they speak to some sensitive areas in our practice and in our society.

The first is a communication from Joe Burd, M.D., a Nashville orthopedic surgeon, which presents rather clearly the dreary legal climate in which we find ourselves, a climate which stultifies and threatens to engulf us, and which seriously hampers our primary function, which is to give medical care to our patients. The fact that it is a reflection of the public mood generally, and that not only doctors, but everyone else, is likely to be sued for no good reason, helps the situation not at all.

Dr. Burd has suggested some interesting alternatives, to which some of our readers might wish to react, either to Dr. Burd personally or through these pages. The JOURNAL would welcome any observations you might have, as it has become clear that although the formation of our own insurance program and recent legislation have ameliorated the situation somewhat, the answer is not yet with us. The only general cure would be dismantling of the contingency system of reimbursement for legal service, a solution not viewed favorably by our colleagues in the legal profession.

The second item concerns the problems associated with our aging population. It came to us from the National Institutes of Health, and I had originally intended to use it as material for an editorial, but further consideration led me to print it "as-is" because it is filled with interesting and useful information. I wish to emphasize what I think is the major point of the article, which is that the medical profession is presently ill-prepared to meet the challenge of an "older" population of 30 million by the year 2000. It is the main reason I chose to carry the item.

In our "Mail Box" is a poignant letter from Dr. "Rudie" Kampmeier, former editor of this JOURNAL, with a perfect picture of what we are talking about, and a plea for legal remedy of one aspect of it. (See also the last section of our first editorial in this issue.)

There is presently little recognition in our schools and training programs of the special problems associated with aging, and in fact there is not a little prejudice among the practicing physicians and teachers toward the aged. Not only is this point made in the article, but it is reinforced by my own observations, and I am sure by yours, as well.

If I survive until the year 2000, I will be one of those aged people. I hope by then this early warning will have allowed you to meet the challenge. For the citizens already in that category, it can't happen soon enough.

J.B.T.



Abortion in Tennessee

To the Editor:

Please pardon the delay in responding to your letter of May 9 and Dr. Shearin's letter of April 20. However, now that I have left Tennessee, I find it more difficult to find resources (and time) to respond to some of the issues. I have recently gotten a response from John Fitzgerald (Counsel to TDPH) and offer the following in response to Dr. Shearin's letter with a couple of additional comments relating to your editorial:

Dr. Shearin is correct in pointing out that Tennessee law does permit third-trimester abortions to preserve the *life or health* of the mother. However, no specific indication is provided as to what is meant by "health" of the mother, and from a practical point of view, there are very few abortions performed during the third trimester. Consequently, I did not include this phrase in my article.

With regard to Dr. Shearin's comments on abortions on non-residents, the Tennessee law does prohibit abortions to non-residents. However, the 1973 Supreme Court decision indicated that such a restriction denied constitutional rights guaranteed by the 14th Amendment. An opinion was, therefore, requested of the Tennessee attorney general and resulted in the flat statement (April 5, 1974) that:

"It is our opinion that the residency requirement set forth in T.C.A. sec. 39-301(f) is unconstitutional under the Fourteenth Amendment of the United States Constitution."

At the risk of seeming combative, I would differ with some of the editor's comments (pp 195-196, March 1977). I fully agree that prevention of unwanted pregnancy is the best solution. Nonetheless, such pregnancies do occur. There has been no dramatic decline in Tennessee's birthrate (or that of the nation) since the 1973 Supreme Court decision to indicate that unthinking decisions regarding unwanted pregnancy are being made. Preliminary figures for 1976 indicate that at least 16,000 abortions were performed in Tennessee and about 1,000,000 nationwide. At the same time, the number of persons enrolled in family planning programs has been steadily increasing.

Two major explanations seem possible—a substantial increase in sexual activity and unwanted pregnancy or the continuation of a relatively stable rate of abortions but open acknowledgement (and reporting) of a higher proportion of them. Although reliable data are hard to come by, it seems likely that both factors are operative.

The conclusion I am left with is that, although abortions are clearly not the ideal approach, they are an essential ingredient in reducing the tragic consequences of unwanted pregnancy.

Alan R. Hinman, M.D.

Director, Immunization Division
Bureau of State Services
Center for Disease Control
Atlanta, GA 30333

Correction

To the Editor:

I was very pleased to see in the April issue of your JOURNAL, sent to me by a friend in Nashville, several articles on my kinsman, Dr. Paul Fitzsimmons Eve. As computed from my genealogical chart, he was a brother of my great-great grandfather.

As a layman I was most interested in the first article, and in the fourth which reviewed Dr. Eve's career as an academician. They were both sympathetic and laudatory, and I am grateful to Drs. Herrington and Byrd, and to you for including the series for publication. However, one note: in all local records the Christian name of the first Eve is spelled "Oswell," not "Oswald."

With thanks for your editorial policy, and best wishes, I am,

William D. Eve
909 Littleton St.
Augusta, GA 30904

Natural Death Act

To the Editor:

Re: Substitute Resolution No. 6-77

Because of a teaching assignment I reached the Reference Committee hearing after its closing. I wish to comment now.

From among the many diseases which invite a "living will," I select *only one*. I wish to speak to the clinical condition which faces each reader unless an earlier death mercifully spares him—a condition for which he may wish to leave instruction for its management while he is still competent. Shakespeare wrote in *As You Like It* of that

"... Last scene of all,
That ends this strange eventful history.
Is second childishness, and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything."

Poetic aesthetics demanded that he omit urinary and fecal incontinence and the stench of decubital ulcers.

In the past six years I have had the responsibility for 1,405 patients admitted to the Medical Service of Central State Psychiatric Hospital. (Kampmeier, *Aun Intern Med*, May 1977.) I have needed to sign

305 death certificates in this period; 84% were for persons over 60 years of age. The majority were so well described by the Bard, "a second childishness, and mere oblivion." For them—today a flicker of recognition of people and things, tomorrow no recall, and for most, oblivion until death. For them an endless round of changing sheets; being cleansed of urine and feces; a catering to the vegetative function of swallowing—by spoon-feeding, liquid diet by B-D syringe or nasogastric tube; fluids parenterally; deep, eroding decubiti in spite of excellent nursing care "out of this world," and indwelling catheters; areflexia of the larynx, aspiration, recurrent pneumonitis too successfully controlled by antibiotics.

And when a son or daughter asks, "His mind is gone. Why do you do this?"—the answer must be, "Neither you nor I can decide otherwise, ethically or legally. Your parent is incompetent." Attorney DeMere offered the gratuitous advice on the Teddy Bart Show, "trust the family." (Recent action of the AMA House of Delegates is equally specious.) I was a fool, in 1977, to stop tube-feeding as I discern other members of the family do not chime in with the plea of sister or brother. Newshounds "at the ready" circle the "goldfish bowl" that is the public institution to scent any irregular treatment. (Note the recent tempest at Camarillo State Hospital, California.)

I beg the right, protected by law, to write while in my "right mind" that I do not wish done unto me what Dr. Kampmeier does to his patients. When I am incompetent I do not wish a tracheostomy, a cardiac pacemaker, a ventriculo-abdominal shunt, nor antibiotic interference with the course of Osler's "friend of the aged." And if the answer is, "you will be in oblivion and won't know—so what?"; I answer, "I do not wish the horror of watching a loved one suffer the indignities to which I have pointed; I wish a memory of happier days and not a caricature of those pictured in a concentration camp!"

I hope at the next Annual Meeting the delegation from some county will have contemplated this dilemma in humane thoughtfulness and, with the advice of Mr. Cornelius, bring to the House a proposed bill which will permit a patient, while still competent, to decide whether he wishes to submit to the indignities of months of incontinence, tube-feeding and decubiti before death. In today's legal climate and institutional treatment of the oldsters, it *must be spelled out* for the protection of the staff. (It is no small problem—I estimate some 80,000 aged, over 65, under institutional care in the United States.) When and if such a delegation prepares to give thought to the matter, I implore them to consider my words to students at the bedside of such a patient and as I note the revulsion written on their faces, "You have seen disease take its toll. But remember, if heart disease, stroke or cancer, or an accident, or an infection does not mercifully kill, you, your mother or your father inevitably will reach this 'last scene of all, that ends this strange eventful

history. . . .'" Too, I hope these colleagues will recall the words of Thomas Jefferson written to John Adams: "Bodily decay is gloomy in prospect, but of all human contemplations the most abhorrent is body without mind."

I pass each day several patients sitting in a chair, head back, staring with unseeing eyes, nasogastric tube and catheter in place, possibly the smell of decubitus—they are my contemporaries or even a bit younger. In horror I think, "but for the grace of God there sit I." Each day lived brings me and mine and you, elderly colleague, who have survived the physical ills of the body, one day nearer to this decay. Let us then offer to ourselves, our loved ones and our fellow men the means, while of "right mind," to avoid the prolongation of life for the "body without mind."

R. H. Kampmeier, M.D.

Former Editor of the JOURNAL

Vanderbilt University School of Medicine
Nashville, TN 37232

Request for Information

To the Editor:

Again this year I am compiling a Biting Insect Summary and would appreciate any case reports of unusual allergic reactions, especially systemic (sneezing, wheezing, urticaria) to bites of insects; i.e., mosquitoes, fleas, gnats, kissing bugs, bedbugs, chiggers, blackflies, horseflies, sandflies, deerflies, etc.

I would like physicians to supply me with case reports of those patients who have had unusual reactions to such insects. Include in your reports the type of reactions (immediate and delayed symptoms), treatment, the age, sex, and race of the patient, the site of the bite(s), the season of the year, and any other associated allergies.

If skin tests and hyposensitization were instituted, I would like the report of both. Please note that it is the biting (not stinging) insect in which I am interested.

If you have found any insect repellent, local treatment, or insecticides of value, I would also appreciate this.

Please send this information to the following address:

Claude A. Frazier, M.D.
4-C Doctors Park
Asheville, NC 28801



Norman Davis, age 45. Died June 7, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

James L. Fuqua, age 70. Died June 9, 1977. Gradu-

ate of University of Tennessee School of Medicine. Member of Nashville Academy of Medicine.

Martin Kerlan, age 67. Died May 6, 1977. Graduate of St. Louis University Medical School. Member of Washington-Carter-Unicoi County Medical Association.

Cecil E. Warde, age 86. Died June 19, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

Thomas L. Waring, age 73. Died June 9, 1977. Graduate of the Medical College of Virginia. Member of Memphis and Shelby County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

GREENE COUNTY MEDICAL SOCIETY

Douglas C. Cobble, M.D., Greeneville

Tsong S. Huong, M.D., Greeneville

KNOXVILLE ACADEMY OF MEDICINE

Lonnie C. May, M.D., Knoxville

MEMPHIS AND SHELBY COUNTY MEDICAL SOCIETY

Richard L. Ennis, M.D., Memphis

Richard G. Hepworth, M.D., Memphis

William A. Lankford, M.D., Memphis

Tommie M. Richardson, M.D., Memphis

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Phillip W. Turner, M.D., Knoxville

RUTHERFORD COUNTY MEDICAL SOCIETY

Karlanders Otterland, M.D., Smyrna

WEST TENNESSEE CONSOLIDATED COUNTY MEDICAL SOCIETY

Elias K. Bond, M.D., Jackson

Charles S. Foster, M.D., Jackson

personal news

Parley Martin Dings, M.D., Clinton, director of the public health departments in Anderson, Scott, Morgan, and Campbell counties has retired after serving 20 years in this capacity.

T. Albert Farmer, M.D., Memphis, chancellor of the University of Tennessee Center for the Health Sciences, was named Citizen of the Year by the Lions Club of Memphis.

Edgar Franklin, M.D., Memphis, has been appointed by the governor to the State Board of Examiners for Speech Pathology and Audiology.

Jack W. Lindsay, M.D., Rockwood, has been elected president of the University of Tennessee National Alumni Association for 1977-78. *James W. Hall, M.D.*, Trenton, has been elected president-elect of the association.

Richard Eric Poehlein, M.D., Chattanooga, and *William A. Prine, Jr., M.D.*, Clarksville, have been named to fellowship in the American Academy of Pediatrics.

Paul Spray, M.D., Oak Ridge, has received the Oak Ridge Rotary Club's new Vocational Service Award in recognition of his yearly trips to give service to mostly Third World nations.

programs and news of medical societies

Nashville Academy of Medicine

Tel-Med to Expand—Tel-Med of Nashville, sponsored by the Academy and Metro Health Department, has been notified of grant approvals by the Levi Strauss Foundation and Tennessee Department of Public Health which will significantly widen the scope of the program. The added funding will enable the expansion of Tel-Med throughout the midstate area (1.4 million population), the development of a Tel-Med Hypertension Information Program in cooperation with the Chronic Disease Prevention Division of TDPH, the replacement of the existing 10-channel information system with a new 15-channel phone system to include three In-Wats lines, and the extension of Tel-Med operations to six days per week to include Saturdays. During the first two years of operation, Tel-Med of Nashville consistently ranked among the top of the 90 installations across the country, having received 401,357 phone requests for Tel-Med taped health messages (1.08 requests per minute).

Sports Medicine Seminar for Team Doctors and other interested physicians will be held 8:15 am to 1:00 pm on Saturday, August 27, at the Holiday Inn-Vanderbilt. Sponsored by the Academy and Vanderbilt University Division of Continuing Education, the seminar will qualify for 4 hours Category 1 credit toward the AMA Physician's Recognition Award and 4 hours prescribed credit, American Academy of Family Physicians. The registration fee of \$10 includes a luncheon.

Four on HSA Board—Drs. Joseph Bistowish, Jack Farringer, George Holcomb and Mr. Raymond Schklar, assistant executive director, have been elected to three-year terms on the board of directors, Middle Tennessee Health Systems Agency (HSA). The HSA will potentially be responsible for the development, implementation, and review of health care facilities and services in the Middle Tennessee area under the direction of HEW.

The Winner



Tom E. Nesbitt, M.D., speaker of the House of Delegates, is honored by his fellow Tennessee delegates to the American Medical Association following the announcement that the Nashville urologist had been elected by unanimous ballot as president-elect of the AMA. After some well-chosen remarks by John H. Burkhart, M.D., of Knoxville, that Andrew Jackson was a noted horse-racer, and that a winner should be appropriately honored, a horseshoe of red carnations was brought on to the floor (photo at left) by Robert H. Haralson, Jr., M.D., of Maryville (left) and A. Roy Tyrer, Jr., M.D., of Memphis (right). In the center photo, Dr. Tyrer places the floral horseshoe on the winner as Dr. Burkhart (left) and William Rial, M.D., vice-speaker of the House (top) look on.

medical news in tennessee

AMA Resolution



The following resolution of commendation, introduced by the Tennessee Delegation to the AMA, was adopted by the House of Delegates at its Annual Meeting:

WHEREAS, Jack E. Ballentine has faithfully and exceptionally served the members of the Tennessee Medical Association and the medical profession in the State of Tennessee for over twenty-six years; and

WHEREAS, The House of Delegates of the Tennessee Medical Association recently recognized Mr. Ballentine for his devout loyalty, seasoned judgment, sound counsel, and for the many contributions to the medical profession as Executive Director of the Nashville Academy of Medicine, and for the past twenty-four years as Executive Director of the Tennessee Medical Association; and

WHEREAS, Mr. Ballentine will retire on December 31, 1977; therefore be it

RESOLVED, That this House of Delegates of the American Medical Association here assembled commend and congratulate Jack E. Ballentine for his many years of outstanding and distinguished service to American medicine.

The JOURNAL is pleased to carry this tribute to Jack for his years of faithful service, and for his many acts of friendship toward those he both guided and served so well.

From the AMA's Office in Washington, D.C.

Talmadge Bill To Curb Hospital Costs

Determined to curb rising hospital costs, the Congress has opened hearings on legislation proposed by Sen. Herman Talmadge (D-Ga.) that would institute a prospective reimbursement plan for the nation's hospitals. The Talmadge bill is considered a rival of the administration's proposal to place a 9% "cap" on hospital revenues.

The administration has told the Senate Finance Subcommittee on Health, headed by Talmadge, that it likes some provisions of the Talmadge bill but that it is imperative that the controversial cap proposal be enacted, perhaps with features of the Talmadge bill included.

Most health provider groups, including the AMA, found the Talmadge plan much more palatable than the administration's bill, though they took issue with some of the Talmadge provisions.

Raymond T. Holden, M.D., chairman of the AMA Board of Trustees, told the subcommittee, "We commend the sponsors of this legislation for its broad coverage of a variety of issues in the Medicare and Medicaid programs." While there are some provisions the AMA does not support, "there are many others which we believe would be beneficial and for which we urge your favorable consideration," Dr. Holden testified.

The administration's arbitrary ceiling or cap on total hospital revenues "lacks appropriate flexibility, provides disincentives for efficiency and in fact would reward inefficiency," said Dr. Holden. "Most importantly that proposal would impact unfavorably most directly upon the continued provision of quality care."

The Talmadge provisions "attempt to meet the hospital cost problem in a more positive and equitable manner than that of the administration," Dr. Holden said. "However, notwithstanding our belief that the Talmadge bill is a more realistic program, we do believe that adoption of the program in the manner presently proposed could have uncertain and perhaps even undesirable effects."

"Risks of any single new program imposed nationally are not warranted at this time especially when there are other potential alternatives which merit similar consideration," Dr. Holden said. "Experiments with various reimbursement methods have not been fully implemented and evaluated. We would recommend that the cost containment incentive program of this bill be the subject of experiment and demonstration in a limited geographic area before being considered for nationwide application. We feel that all interested parties would benefit from such a procedure."

The AMA witness termed "beneficial" another provision encouraging the voluntary elimination of

underutilized beds and the closing of facilities or parts thereof.

Dr. Holden said, "We also recognize the problem of increasing health costs and are seeking solutions." He noted the AMA's establishment of a National Commission on the Costs of Medical Care, which will examine the causes of medical care cost inflation and recommend policies that will contribute to containment of medical expenditures. The final report will be issued in January, 1978.

Also appearing for the AMA was Edgar T. Beddingfield, Jr., M.D., chairman of the AMA Council on Legislation. Dr. Beddingfield said several provisions of the bill on physician reimbursement "could have a detrimental effect on the availability and quality of care." The proposed creation of a special class of practitioners, designated as "participating physicians," though somewhat modified this year, would still cover those who agreed to accept all Medicare reimbursement for their services on the basis of assignments. Inducements such as simplified claims procedures would be offered to encourage physicians to become "participating physicians."

Dr. Beddingfield said the proposal "does not reach the issue of why assignments are not widely accepted. The major deterrent to assignments is the insufficient reimbursement rate under Medicare and this proposal does not correct this problem."

Also criticized were the proposed Talmadge criteria for determining Medicare reasonable charges for physicians' services which would allow the government to determine statewide prevailing charge levels for each state, based on 50% of the charges made for similar services in the state. Prevailing charge levels in a locality would continue to be subject to an economic index, but any increase in the prevailing charge level could not exceed the statewide prevailing charge by more than one third.

"The real effect of this change," Dr. Beddingfield said, "would be a further restriction on reimbursement levels in the state achieved primarily through a reduction in the already limited increases which would otherwise be allowed under the Medicare Economic Index."

The administration has damned the Talmadge bill with faint praise. Recognizing that Talmadge's measure poses a serious threat to the administration's controversial Hospital Cost Containment Plan, HEW Secretary Califano devoted a great deal of his testimony during the hearings to plugging the administration's approach. He had praise for some facets of the Talmadge bill, expressing the hope the two approaches could be melded, but his criticism of the key prospective hospital reimbursement provision was so strong that a marriage may be difficult.

Califano said the Talmadge reimbursement plan suffers from lack of available data and methodology to put it into effect. "Further, it only covers about 35 to 40% (Medicare-Medicaid) of present hospital costs, and will not, in our judgment, effectively control costs in the immediate future," said Califano.

The Talmadge plan could cost up to \$50 million more next fiscal year, in contrast with the estimated

national savings of \$1.9 billion for the administration's Hospital Cost Containment Act, according to the cabinet officer.

"We feel strongly that the problem of rising costs is of such disastrous proportions that we simply cannot wait for a perfect solution before acting," Califano testified.

The administration supports the concept of prospective reimbursement of hospitals, he said, but "holding down Medicare and Medicaid payments alone could simply encourage hospitals to refuse these patients, to provide such patients with second-class care, or to transfer their costs to other payors."

In other testimony, John Alexander McMahon, president of the American Hospital Association, said the Talmadge bill overall "reflects an understanding and consideration" of the complexities of the health care delivery system. However, McMahon said the AHA objects to some provisions. He singled out the proposed uniform percentage limits on increases in revenues which "would exert the heaviest pressures where they are least appropriate—on the most efficient hospitals."

Califano Proposes Physician Fee Controls

Physician fees eventually may need cost controls, HEW Secretary Califano has told Congress.

"Eventually the health care system will have to deal with physician fees," the secretary told the Senate Finance Subcommittee on Health.

Califano said he and President Carter considered controls on physician fees as well as hospitals earlier this year but rejected them "because we just don't know yet how to deal with that problem."

Califano also opposed a provision in the Medicare-Medicaid reform bill by Subcommittee Chairman Talmadge which would lift the legal requirement for publishing the names and income of physicians and other Medicare providers. The HEW official said "sunshine is the greatest disinfectant," referring to the so-called Sunshine, or Freedom of Information Law.

Talmadge said he would withdraw the provision "if you (Califano) guarantee the accuracy" of future reports.

Califano noted that he apologized to the AMA for the high rate of error in this year's report and that a revised and corrected list would be published.

Anti-Fraud and Abuse Legislation Imperils Confidentiality

The Medicare-Medicaid anti-fraud and abuse legislation is winding through a complicated pathway in two powerful house committees—Ways and Means and Commerce. Both committees have jurisdiction over the bill before it reaches the floor.

The Ways and Means Committee is ready to report a bill and the full Commerce Committee is preparing to act also. One major difference between the committees, not yet resolved, is the degree of access federal investigators will have to patient records for

the purposes of fraud and abuse investigations and epidemiological surveys.

The Senate will not take up the measure until the House completes its work on the bill.

Inspector General UnCOVERS Fraud and Abuse Cases

In an effort to boost the new Office of Inspector General, HEW Secretary Califano has charged that fraud and abuse by physicians and pharmacists in the Medicaid program "is a serious problem."

He said, "This conclusion emerges from an innovative, systematic two-month-old investigative effort being conducted by HEW's new inspector general, working in cooperation with the new Health Care Financing Administration."

Califano said that through computers programmed to flag suspicious cases in state Medicaid files, 172 cases have been identified involving "what appear to be the worst physician and pharmacist offenders against the Medicaid system." He did not release any names.

The 172 cases warrant further investigation and may lead to prosecution, according to the secretary. They are spread over 45 states and the District of Columbia. Ninety-two cases involve physicians, and 80 deal with pharmacists.

The new computerized system has allowed HEW to screen 252 million transactions over a 12-month period involving 231,000 physicians (108 million claims) and 44,000 pharmacies (144 million claims).

The goal of the new investigation—which is called "Project Integrity"—is to identify 500 cases of apparently flagrant physician and pharmacist fraud or abuse in Medicaid.

Physicians and pharmacies were chosen as initial targets of the new computer investigation "because computer programs were already available for application of the innovative techniques."

Physicians and pharmacies receive about 16% of Medicaid expenditures (which total \$18 billion this year, including a \$7.8 billion state share). Estimates of fraud and abuse in Medicaid are estimated at between \$800 and \$900 million annually, said Califano.

NHI Push Renewed

Renewed prospects of administration activity next year on national health insurance has spurred congressional interest in the issue. At last count 22 lawmakers from both parties have co-sponsored the AMA's comprehensive health insurance plan for all, bringing to 30 the number of senators and representatives who have backed the proposal officially.

Early next year, the Carter administration will submit its own NHI plan. President Carter and HEW Secretary Califano have said they will make a determined effort to secure congressional enactment.

Major hearings on NHI are a certainty in Congress next year. Though time will be a severe prob-

Continued on page 616

American Health Care Spending Lags Behind Non-Essential Costs

Americans spend a lot of money on health care, but they spend a lot more on some other things—recreation, alcohol, tobacco and personal grooming—for instance.

The latest figures on how Americans spent money in 1975 from the U.S. Department of Commerce are:

Recreation, \$66 billion; alcohol, \$24.68 billion; tobacco, \$14.8 billion; and personal grooming, \$14.27 billion, for a total in these four areas of \$119.75 billion.

Hospitals, \$34.67 billion; physicians' services, \$22.11 billion; all other health care, \$19.83 billion; and drugs, \$9.82 billion, for a total on health care of \$86.43 billion.

Journal Lists Signs Of Troubled Adolescents

When is that exasperating adolescent around the house just "going through a phase" and when is he or she a disturbed person who needs help?

Despite many popular opinions to the contrary, most of today's adolescents function with gratification and competence in most spheres of their lives most of the time, reports an article in the May 16 issue of *JAMA*.

Symptoms that will require treatment by a specialist develop only in a minority of youngsters. But during this period of rapid, serious, and lasting change in the young person's life, the family doctor is faced with the enigma of what behavior is merely normal growth and development, and what is something else.

In assessing seriousness of adolescent adjustment problems, family physicians should consider five areas: (1) family relationships, (2) peer relationships, (3) school performances, (4) extracurricular activities, and (5) pathologic indicators, including antisocial, self-destructive, and bizarre behavior.

The doctor starts by finding what the adolescent thinks about himself. How he functions within the family is especially helpful in understanding his needs and strengths. Do arguments linger in a smoldering fire or in excessive withdrawal?

By adolescence, a normal youngster has developed the capacity for solid friendship. Exploring peer relationships may show a spread of difficulties outside the home. Does he have friends, or is he lonely and shy? By midadolescence, interests in the opposite sex emerge, and by late adolescence most teenagers have begun dating, at least tentatively.

Ask the adolescent to describe his best friend. The average youth will give a fairly good picture, both what is likeable and what is not. The disturbed youngster's description may often include only one characteristic, and is monotonous and flat.

Examination of school grades in relation to intellect and family expectations may uncover inhibition, anxiety, poor frustration tolerance, poor impulse control, depression. Do teachers like him? Has there been truancy or general withdrawal? Is he interested in extracurricular activities? One can learn where the adolescent's energies are centered by asking what he enjoys, what he does after school and on weekends, and with whom he likes to be.

The doctor finds that parents often do not readily report bizarre antisocial behavior. Have there been legal transgressions, property destruction, or assault? Has there been drug abuse or promiscuity? Are birth control methods used? Has he or she run away?

The family doctor is advised to be clear, firm and direct in referring troubled adolescents for specialist treatment.

New Disease of Children Reported in United States

American physicians who care for children are alerted to watch for a new disease that has appeared in the last few years bearing the formidable medical name of mucocutaneous lymph node syndrome (MLNS).

First reported in Japan, the ailment also is known as Kawasaki disease. Affecting primarily young children, the disease causes fever, reddening of the mouth, throat, lips, palms and soles, and swelling and disfigurement of the fingertips. It usually is a benign, self-limiting illness, but the child may be quite ill during its course. The symptoms sometimes are mistaken for Rocky Mountain spotted fever.

Almost 7,000 cases have been reported in Japan, and some 40 cases in the United States. The 40th case is described in the May 23 issue of *JAMA*. It occurred in a 7-year-old girl who had been on a camping trip to southeastern Arizona.

The principal symptom of MLNS is a high fever lasting from one to two weeks. It does not respond to treatment with antibiotics. The red rash begins to appear on the third to fifth days of illness, followed by swelling of the hands and feet. The report describes extensive tests conducted to determine the cause of the problems, with the final diagnosis of MLNS. Findings were confirmed by the Japanese physician who first described the illness, Tomisaku Kawasaki, M.D. The rash was most suggestive of Rocky Mountain spotted fever, thus complicating the diagnosis.

Although most patients recover satisfactorily, they are quite ill for periods up to several months, and a small percentage develop heart problems. Age range is three months to 12 years, with a peak at age 3 years. Two percent of the small victims die, usually from heart complications.

The disease reached epidemic proportions in Japan within a few years' time, and an investigation of the problem of MLNS should be pursued vigorously in North America.

Clinical Center Study of Patients With Stage II or Stage III Non-Seminomatous Testicular Cancer

The cooperation of physicians is requested in the referral of patients with bulky Stage II or Stage III non-seminomatous testicular cancer for a study being conducted by the Surgery Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Intensive chemotherapy with or without reductive surgery is being evaluated in patients with bulky disease that has metastasized to the retroperitoneum or lungs.

To refer a patient or to obtain further information, please write or call: Dr. Nasser Javadpour, Surgery Branch, NCI, Clinical Center, Room 10N218, NIH, Bethesda, MD 20014; Tel. (301) 496-3351.

Clinical Center Study of Patients With Male Breast Cancer

The cooperation of physicians is requested in the referral of patients with male breast cancer for a study being conducted by the Medicine Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients at all stages of diseases are potentially acceptable if they are ambulatory, under 65 years of age, and in otherwise good health. The studies involve evaluations of chemotherapy and hormone therapy.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, NCI, Clinical Center, Room 12N-226, NIH, Bethesda, MD 20014; Tel. (301) 496-4916.

Clinical Center Study of Patients with Small Cell (Oat Cell) Carcinoma Of the Lung

The cooperation of physicians is requested in the referral of patients with small cell (oat cell) carcinoma of the lung for studies being conducted by the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Harmar D. Brereton, M.D., NCI, Clinical Center, Room B3B-38, NIH, Bethesda, MD 20014; Tel. (301) 496-5457.

Clinical Center Study of Patients With Metastatic Breast Cancer

The cooperation of physicians is requested in the referral of patients with breast cancer for studies being conducted by the Medicine Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Studies will involve the investigation of hormone, hormone and chemotherapy, and chemotherapy manipulations.

All patients with disseminated breast cancer will be considered for entrance to the program if they are (1) less than 65 years of age and they have received no prior hormone therapy; (2) have received no prior chemotherapy; (3) have no complicating medical disease; and (4) have evaluable disease.

Patients may withdraw from the program upon request by the individual or the referring physician.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, NCI, Clinical Center, Room 12N-226, NIH, Bethesda, MD 20014; Tel. (301) 496-4916.

IMPACT annual dues includes membership in AMPAC (AMERICAN MEDICAL POLITICAL ACTION COMMITTEE). Types of Membership: <i>SUSTAINING</i>: A minimum contribution of\$65.00 <i>REGULAR</i>\$25.00 <i>AUXILIARY</i> ..\$15.00 (Partners in Politics)	You can remit your annual IMPACT dues to your County Medical Society Secretary or send direct to: IMPACT P.O. Box 22645 Nashville, Tennessee 37202 Enclosed is my check for \$_____ for my _____ annual dues. Please enroll me as a <i>SUSTAINING</i> member _____ <i>REGULAR</i> member _____ <i>AUXILIARY</i> member _____. Name _____ Address _____ City _____ Zip Code _____ Phone _____ If your practice is incorporated, IMPACT and AMPAC voluntary political contributions should be written on a PERSONAL CHECK. Contributions are not limited to the suggested amount. Neither the AMA, TMA nor the local county medical society will favor or disadvantage anyone based upon the amounts of or failure to make PAC contributions. Copies of IMPACT and AMPAC reports are filed with the Federal Election Commission and are available for purchase from the Federal Election Commission, Washington, D.C. Contributions are subject to the limitations of FEC Regulations, Sections 110.1, 110.2 and 110.5 (Federal regulations require this notice).
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CALENDAR OF MEETINGS

NATIONAL

1977

- Sept. 1-6 Pan American Medical Women's Alliance, Holiday Inn, San Juan, Puerto Rico
- Sept. 7-9 National Conference on Human Values and Cancer, sponsored by American Cancer Society, Palmer House, Chicago
- Sept. 8-10 American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Virginia
- Sept. 9-11 Mid-Continent Psychiatric Association, Oklahoma City
- Sept. 10-11 AMA Regional Meeting, Sheraton, Hartford, Connecticut
- Sept. 10-12 AMA Seminar on Negotiations, Radisson South Hotel, Bloomington, Minnesota
- Sept. 15-17 American Association for the Surgery of Trauma, Renaissance Plaza, Detroit
- Sept. 16-17 AMA Hospital Medical Staff Leadership Workshops, Carrousel Inn, Columbus, Ohio
- Sept. 16-18 AMA Regional Meeting, Tan-Tar-A, Lake of the Ozarks, Missouri
- Sept. 24-25 AMA Regional Meeting, Holiday Inn, Chicago
- Sept. 25-29 Kentucky Medical Association, Ramada Inn-Hurstborne, Louisville
- Sept. 27-30 American Roentgen Ray Society, Sheraton Boston, Boston
- Sept. 28-30 American Society of Internal Medicine, Washington, D.C.
- Sept. 30-Oct. 2 AMA Regional Meeting, The Homestead, Hot Springs, Virginia
- Oct. 2-6 American Academy of Ophthalmology and Otolaryngology, Dallas
- Oct. 5-7 American Academy of Occupational Medicine, Brown Palace, Denver
- Oct. 5-8 American Group Practice Association, Hyatt Regency, Houston
- Oct. 6-8 Central Association of Obstetricians and Gynecologists, Broadwater Beach Hotel, Biloxi, Mississippi
- Oct. 7-8 AMA Hospital Medical Staff Leadership Workshops, Marriott Hotel, Chicago

- Oct. 7-9 AMA Regional Meeting, Sawmill Creek, Huron, Ohio
- Oct. 9-14 Congress of Neurological Surgeons, San Francisco Hilton
- Oct. 10-13 American Academy of Family Physicians, Las Vegas Hilton
- Oct. 12-15 Southeastern Chapter of Nuclear Medicine, Hyatt House and Benton Convention Center, Winston-Salem, North Carolina
- Oct. 15-19 American Society of Anesthesiologists, Marriott and Roosevelt, New Orleans
- Oct. 16-20 American Medical Tennis Association, Lakeway World of Tennis, Austin, Texas
- Oct. 17-21 American College of Surgeons, Fairmont Hotel, Dallas
- Oct. 20-28 American Society of Clinical Pathologists, Convention Center and Hilton Hotel, Las Vegas
- Oct. 21-23 Society of Nuclear Medicine, Aladdin Hotel, Las Vegas
- Oct. 23-29 American College of Gastroenterology, Marriott, New Orleans
- Oct. 30-Nov. 3 American College of Chest Physicians, MGM Grand Hotel, Las Vegas
- Oct. 30-Nov. 3 AMA Regional Meeting, Honolulu
- Oct. 31-Nov. 3 Interstate Postgraduate Medical Association, Diplomat Hotel, Hollywood, Florida

STATE

- Oct. 3-4 Tennessee Valley Medical Assembly, Chattanooga Choo Choo Convention and Concert Hall
- Oct. 21-22 American College of Physicians—Tennessee Regional Meeting, Hyatt Regency Hotel, Memphis
- Nov. 2-4 Tennessee Academy of Family Physicians, River Terrace and Civic Auditorium, Gatlinburg

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The agent you choose in mild to moderate essential hypertension should offer (1) long-term effectiveness, (2) patient comfort and compliance.

Zaroxolyn offers both.

In one long-term study¹ Zaroxolyn brought moderately elevated (average 161/109 mm Hg) blood pressure down to the range of normotension—and held it there for a year or more.

The investigator noted, "Patient cooperation was surprisingly good for a study of such duration [2½ years]. The once-daily dosage schedule with

metolazone [Zaroxolyn] no doubt contributed to patient compliance."

Overall compliance with Zaroxolyn is good—very good. An analysis of controlled clinical studies involving 188 Zaroxolyn patients showed that only eight discontinued therapy because of side effects. That's a discontinuation rate of only 4.3%, and broader clinical experience appears to substantiate this low rate.²

Zaroxolyn. For long-term control and comfortable compliance in mild to moderate hypertension.

Recommended initial dosage in mild to moderate essential hypertension—2½ to 5 mg once daily

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(metolazone, Pennwalt)

2½-mg, 5-mg and 10-mg tablets

once-daily antihypertensive diuretic

Before prescribing, see complete prescribing information in the package insert, or in PDR, or available from your Pennwalt representative. The following is a brief summary. **Indications:** Zaroxolyn (metolazone) is an antihypertensive diuretic indicated for the management of mild to moderate essential hypertension as sole therapeutic agent and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with heart failure and renal disease. **Contraindications:** Anuria, hepatic coma or precoma, allergy or sensitivity to Zaroxolyn. Or, as a routine in otherwise healthy pregnant women. **Warnings:** In theory cross-allergy may occur in patients allergic to sulfonamide-derived drugs, thiazides or quinethazone. Hypokalemia may occur, and is a particular hazard in digitalized patients; dangerous or fatal arrhythmias may occur. Hypotension and hyperuricemia may be noted or precipitated. Considerable potentiation may occur when given concurrently with furosemide. When used concurrently with other antihypertensives, the dosage of the other agents should be reduced. Use with potassium-sparing diuretics may cause potassium retention and hyperkalemia. Administration to women of childbearing

age requires that potential benefits be weighed against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use. **Precautions:** Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather. **Adverse Reactions:** Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth,

hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyperglycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks. **Usual Initial Once-Daily Dosages:** mild to moderate essential hypertension—2½ to 5 mg; edema of cardiac failure—5 to 10 mg; edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy. **How Supplied:** Tablets, 2½, 5 and 10 mg.

References:

1. Dornfeld L, Kane R: Metolazone in essential hypertension. The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18: 527-533, 1975.
2. Data on file, Medical Department, Pennwalt Prescription Products.


Pennwalt Prescription Products
Pharmaceutical Division
Pennwalt Corporation
Rochester New York 14603

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.

Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.J.D.M., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1977-78

Aug. 4- Oct. 13	Internal Medicine Intensive Review (each Thursday—33 hours)
Fall, 1977	First Annual John S. Zelenik Lecture
Sept. 23-24	Pediatric Cardiology—8th Annual Pediatric Symposium (9 hours)
Sept. 29- Oct. 1	William F. Orr Lectureship in Psy- chiatry
Oct. 17-22	Family Practice Intensive Review (48 hours)
Nov. 1-5	6th Annual Rhamy-Shelley Lectures (16 hours)
Nov. 11-12	Anesthesiology Update 1977 (7 hours)
Dec. 1-2	What's New in Obstetrics for Phy- sicians? (10 hours)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
March 22-24	Clinical Endocrinology (21 hours)
Spring, 1978	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Sym- posium (12 hours)

- Spring, 1978 Annual Barney Brooks Lectureship in Surgery (1 hour)
- Spring, 1978 Annual L. W. Edwards Memorial Lecture (1 hour)
- April, 1978 Annual Frank E. Luton Lecture in Psychiatry (1 hour)
- May, 1978 Postgraduate Course in Allergy
- May, 1978 Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)
- May 24-25 17th Annual Seminar in Psychiatry, for Non-Psychiatrists (11 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Knoxville Unit

- Oct. 7 6th Annual Internal Medicine Symposium—Wood Memorial Auditorium (Univ. of Tenn. Memorial Research Center and Hospital), Knoxville. *Credit:* AMA Category 1 and AAFP Prescribed.
- Oct. 16-18 Cancer Concepts 1977—Sheraton Inn, Gatlinburg, TN. *Credit:* 12 hours AMA Category 1.
- Oct. 20-22 Pediatric Orthopedic Conference—Sheraton Hotel, Gatlinburg, TN. *Credit:* 11½ hours AMA Category 1.

For information and/or a brochure contact: Dr. Harvey Goodman, Director of CME, UTCHS, 1923 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.

TENNESSEE PUBLIC HEALTH ASSOCIATION

- Nov. 15-17 Tennessee Public Health 1877-1977: A Century of Progress, A Challenge for the Future (national conference celebrating the centennial of public health in Tennessee)—Hyatt Regency, Nashville.

For information contact: Anne Stringham, 360 Capitol Hill Bldg., Nashville, TN 37219, Tel. (615) 741-1614.

EAST TENNESSEE CHILDREN'S HOSPITAL

- Nov. 1-2 Pediatric Neurology

- April 18-19 A Day and One Half of Practical Pediatrics

- May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

TENNESSEE ACADEMY OF FAMILY PHYSICIANS

- Nov. 2-4 Annual Meeting—River Terrace & Civic Auditorium, Gatlinburg. *Credit:* up to 30 hours AMA Category 1 and AAFP Prescribed. *Fee:* physicians, \$25; interns and residents, none.

For information contact: Doris Darrow, Tennessee Academy of Family Physicians, 112 Louise Ave., Nashville, TN 37203, Tel. (615) 327-3515.

TENNESSEE CHAPTER AMERICAN COLLEGE OF PHYSICIANS

- Oct. 21-22 Tennessee Regional Meeting (Advances in Diagnosis & Treatment/Principles of Prevention)—Hyatt Regency Hotel, Memphis.

For information contact: Blair D. Erb, M.D., Governor for ACP Tennessee Chapter, 616 W. Forest Ave., Jackson, TN 38301, Tel. (901) 424-2345.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians an ideal emotional counseling technique that fits busy office practices. The technique uses a concept of emotions that is consistent with human anatomy and psycho-physiology. Yet, the technique requires no more physician time or patient cost than routine evaluations of new patients. Finally, the technique is readily understandable and easy for practitioners to apply.

One, two and three week courses. Minimum of 40 hours per week. *Tuition Fee:* \$350 per week for the 1st & 2nd week of training; \$500 for 3rd week of supervised practice with patients in the Intensive RBT Treatment Program.

For further information contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1977-78

- Sept. 16-17 Fiberoptic Bronchoscopy Workshop—University of Kentucky, Lexington. *Credit:* 13 hours AMA Category 1. *Fee:* \$200.
- Oct. 2-7 Eighth Family Medicine Review (Session I and Session II)—Hyatt Regency, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.
- Oct. 23-28
- Nov. 10-12 Pulmonary Function: New Concepts and Techniques—University of Kentucky, Lexington and VA Hospital. *Credit:* 16 hours AMA Category 1. *Fee:* \$275.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Three eight-week courses in sonic medicine will be offered at Bowman Gray School of Medicine on the following dates: Sept. 12-Nov. 4, 1977; Jan. 9-March 3, 1978; April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. An additional two-day course is offered for obstetricians on Dec. 8-9, 1977. *Credit:* 6 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Medical Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

KENTUCKY DIVISION AMERICAN CANCER SOCIETY

- Nov. 4-5 Cancer of the Bladder and Prostate—Stouffer's Inn, Louisville. *Fee:* None; space limited.

For information contact: George A. Sehlinger, M.D., President, American Cancer Society, Kentucky Division, 2313 Medical Arts Bldg., Louisville, KY 40217.

UNIVERSITY OF MISSISSIPPI SCHOOL OF MEDICINE

- Nov. 10-11 Cardiovascular Review Seminar—University of Mississippi Medical Center, Jackson, MS. *Fee:* \$100; registration limited. *Credit:* 17 hours AMA Category 1; AAFP applied for.

For information contact: Continuing Health Professional Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

- Nov. 10 13th Annual Louisville Pediatric Society Lectureship—Health Sciences Center Auditorium, Louisville.
- Nov. 11-12 11th Annual Newborn Symposium

For information contact: Billy F. Andrews, M.D., Department of Pediatrics, University of Louisville School of Medicine, 200 E. Chestnut St., Louisville, KY 40202.

OF SPECIAL INTEREST

AMERICAN COLLEGE OF PHYSICIANS Regional Meetings, Postgraduate Courses

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related specialties.

The ACP Postgraduate Courses provide the opportunity for in-depth study in a wide range of topics related to internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

ACP Regional Meetings and ACP Postgraduate Courses have been approved by the American Medical Association Advisory Committee on Continuing Medical Education. They fulfill Category 1 requirements for the AMA Physician's Recognition Award.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Special ACP-MKSAP Courses

The ACP will sponsor 23 courses, providing intensive review of the entire spectrum of medicine, over a five-day (30 hour) period. These courses will differ from any ever presented in that they complement self-learning activities (through the ACP Medical Knowledge Self-Assessment Program—IV) and will also serve to prepare physicians for this fall's American Board of Internal Medicine recertification examination.

MKSAP Course Schedule

September

- | | |
|-------|---|
| 7-11 | Ann Arbor, MI
Richmond, VA
San Francisco, CA |
| 14-18 | Kansas City, MO |
| 26-30 | Cambridge, MA
Los Angeles, CA
Philadelphia, PA
Rochester, MN
Washington, DC |

October

- 1-5 Montauk, LI, NY
3-7 Cincinnati, OH
Denver, CO
Houston, TX
Pittsburgh, PA
10-14 Chicago, IL
17-21 Cleveland, OH
New Orleans, LA

A catalog on the courses is available by writing: Registrar, ACP-MKSAP Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Aug. 8- Sept. 4 Chronic Hemodialysis: Maximizing the Potentials—with Eli A. Friedman, M.D., director of the Division of Renal Diseases, Downstate Medical Center, Brooklyn.
Assessing the Child with Acute Abdominal Pain—with Russell S. Asnes, M.D., director, pediatric ambulatory services, Columbia Presbyterian Medical Center, New York City.
The Undergrown Infant: An American Problem—with Myron Winick, M.D., director of the Institute for Human Nutrition, Columbia University College of Physicians and Surgeons, New York City.
- Sept. 5- Oct. 2 Clinical Immunology Update
- The Mechanisms of Immune Competence
 - Immune Deficiency Disorders
 - Autoimmune Diseases
- The telecourse faculty on this three part program is Robert M. Nakamura, M.D., chairman, Department of Pathology, Scripps Clinic Medical Institutions, La Jolla, Cal. and Ernest S. Tucker, M.D., University of California School of Medicine, San Diego.

DUKE UNIVERSITY MEDICAL SCHOOL

- Oct. 24-28 Radiology Postgraduate Course—Southampton Princess Hotel, Bermuda.
Credit: 25 hours AMA Category 1.

For information contact: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

- Sept. 10-16 Annual Otolaryngologic Assembly of 1977—Eye and Ear Infirmary of the

University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

- Oct. 31- Nov. 5 Laryngology and Bronchoesophagology —Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact: Department of Otolaryngology, Eye and Ear Infirmary, 1855 W. Taylor St., Chicago, IL 60612.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION

Interstate Scientific Assembly

- Oct. 31- Nov. 3 62nd Annual International Scientific Assembly of Interstate Postgraduate Medical Association—Diplomat Hotel, Hollywood, FL. In cooperation with the Fla. Acad. of Family Physicians, the Univ. of Miami, and the Univ. of Fla.-Gainesville. *Credit: 26 hours AAFP and AMA. Fee: \$75 in advance; \$100 at the meeting.*

For information contact: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, WS 53701.

AMERICAN COLLEGE OF CHEST PHYSICIANS

- Oct. 30- Nov. 3 43rd Annual Scientific Assembly (Cardiopulmonary Medicine and Surgery: Current Perspectives and Future Frontiers)—MGM Grand Hotel, Las Vegas.
- Oct. 30 Management of a Respiratory Therapy Service (postgraduate course held in conjunction with ACCP Scientific Assembly)
- Oct. 31 Cardiopulmonary Technology Today (postgraduate course held in conjunction with ACCP Scientific Assembly)

For information contact: Dale E. Braddy, MS, Director of Education, ACCP, 911 Busse Hwy., Park Ridge, IL 60068.

BETH ISRAEL HOSPITAL DENVER, COLORADO

Continuing Education Schedule 1978

- Feb. 11-18 Third Annual Vail Family Practice Conference, The Mark, Vail
- Feb. 18-25 Fourth Annual Vail OB/GYN Conference, The Mark, Vail
- Feb. 25- Mar. 4 Eighth Annual Aspen Radiology Conference, The Aspen Institute for Humanistic Studies, Aspen

- Mar. 4-11 Third Annual Vail Psychiatry Conference, The Kiandra-Talisman, Vail
- Mar. 4-11 First Annual Vail Cancer Conference, The Lion Square Lodge, Vail
- Mar. 11-18 Third Annual Vail General Surgery Conference, The Mark, Vail
- Mar. 18-25 Third Annual Vail Internal Medicine Conference, The Mark, Vail

- Mar. 18-25 First Annual Vail Urology Conference, The Lion Square Lodge, Vail

Credit: These meetings are approved for up to 25 hours AMA Category 1 (depending upon number of class hours scheduled) and credit has been applied for from the appropriate specialty colleges. *Fee:* general registration, \$190; house officers, \$125.

For information contact: Beth Israel Hospital Conference & Institute Program, 1818 Gaylord St., Denver, CO 80206.

National News . . .

Continued from page 605

lem, there is a chance of final action on some measure.

The AMA proposal is designed to insure that all Americans receive private health insurance and financial protection against catastrophic illness. Federal contribution to premium cost would be geared to income. Federal intervention is kept to a minimum. Standards of benefits would have to be met by all insurance plans.

The AMA plan was first dropped in the hopper by Sen. Clifford Hansen (R-Wyo.), and Reps. Tim Lee Carter, M.D. (R-Ky.), John Duncan (R-Tenn.), and John Murphy (D-N.Y.).

FTC Says Medicine Is a Business

"The Federal Trade Commission is not a health or medical agency," FTC Chairman Michael Pert-

schuk has told a conference on competition in health care.

"The business of the FTC is business, and we recognize, along with most Americans, that the delivery of health care is business, an industry of vast proportions and vital effect. Health care has become our business."

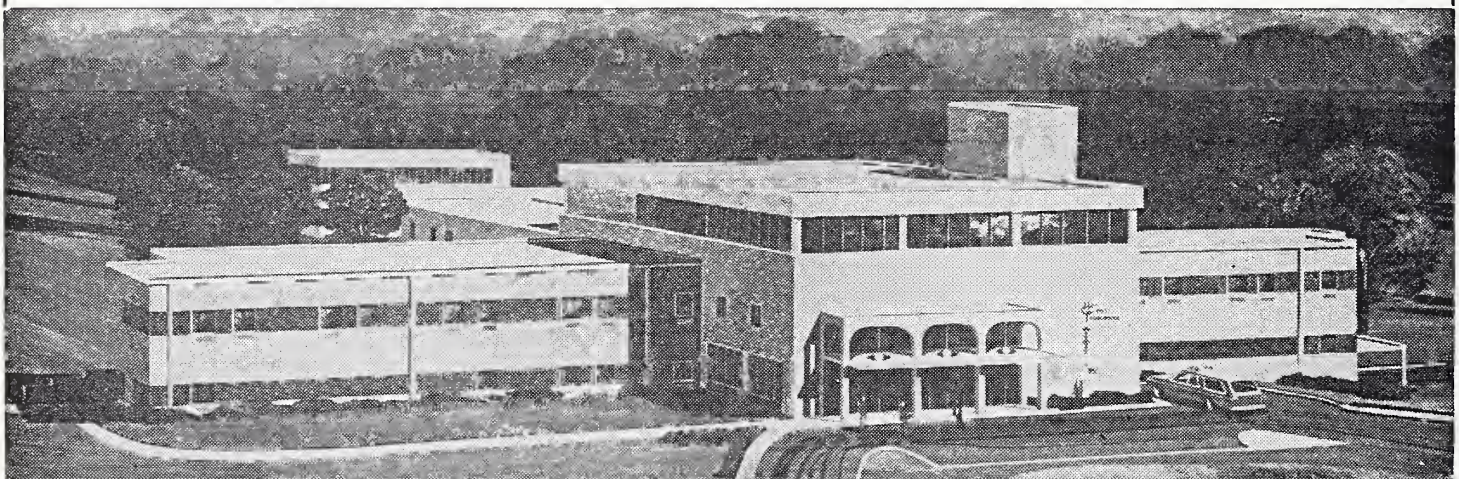
Mr. Pertschuk opened a two-day conference, sponsored by the FTC which rarely holds such events, with a reference to the AMA.

"The FTC is now in the process of receiving documents subpoenaed from the AMA, and certain state and local medical societies. Our intention is to learn how self-regulation—professional control over voluntary and state agencies—really works. There is reasonable doubt that the medical profession, by itself or through friendly state governments, is completely open to innovation, competition, quality control, or consumer choice."

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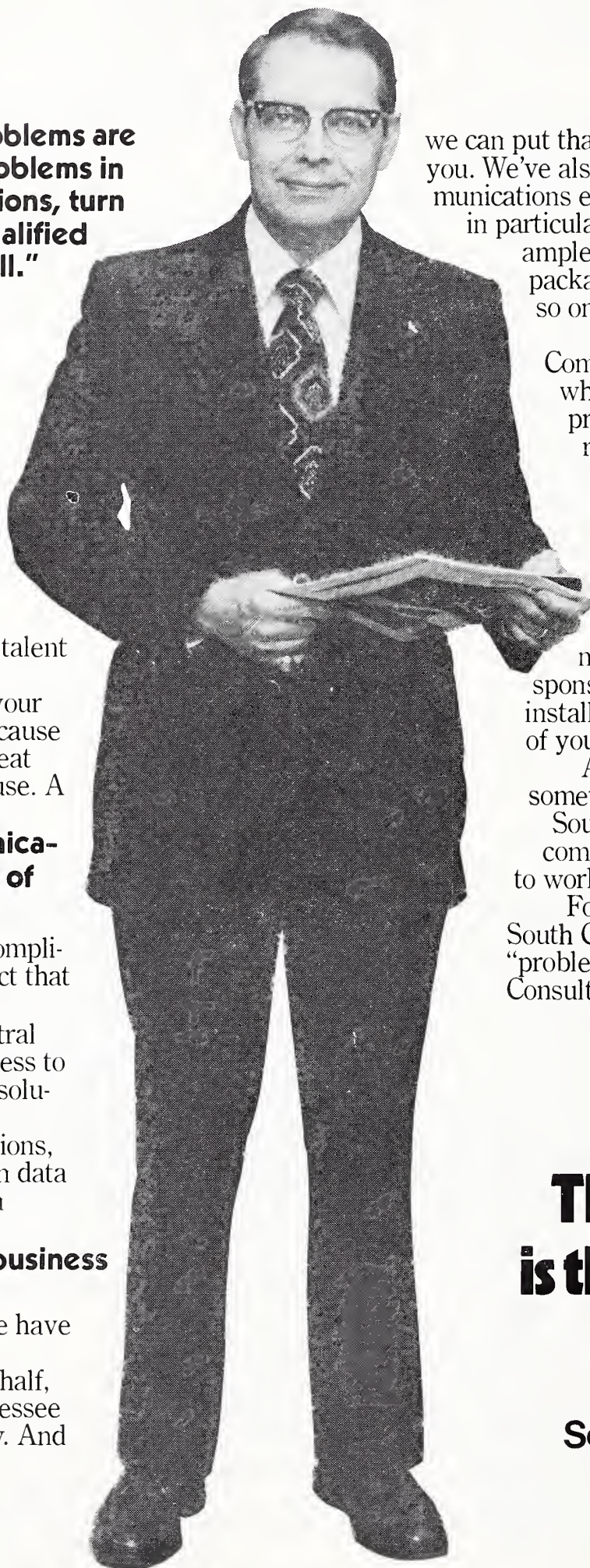
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Hemiplegia—A Six-Year Summary

W. T. SATTERFIELD, JR., M.D.

Over the past six years I have been privileged to be associated with a group of young men and women paramedicals who are not only knowledgeable, imaginative, and energetic but above all compassionate. To them this synopsis is respectfully dedicated.

In April 1971 the Stroke and Trauma Unit of the Baptist Memorial Hospital was opened at the Lamar Unit, an autonomous but integral part of the vast Baptist Hospital Complex in Memphis.

Two realistic goals of rehabilitation were established: psychologic acceptance of the handicap, and adaptation to the physical limitations imposed by the handicap. The former we felt could best be accomplished by patient exposure to fellow patients with similar or more severe problems, and the latter by training supervised by a well-coordinated, specially trained multidisciplinary team composed of physicians, nurses, physical, occupational and speech therapists, social workers, psychologists, orthotists, chaplains and dieticians. We felt that return to the labor market or even ambulation was not necessarily the *par excellence* of a successful rehabilitation program.

Under this format, 1,222 patients have been admitted to the unit. Of these, 1,135, or 93%, had cerebrovascular accidents causing hemiplegia, while the remainder had hemiplegia and/or other neurological deficits from head or extracranial cerebrovascular injuries or benign brain tumors. The malignant brain tumors, in general, carry such a poor overall prognosis that at the present time they are excluded from admission.

The only admission criterion, other than hemiplegia or severe neurological deficit, is the ability of the patient to obey commands given either

verbally or gesturally. This is determined in most cases by the medical director's personal examination prior to admission. All are admitted only by physician referral for a two-week evaluation period. If a realistic rehabilitation goal can be established by the team, treatment continues toward that goal. If not, the patient is discharged. In order to effect a smooth transition from the sheltered environment to the "outside world" the family is included in our program from evaluation to ultimate discharge.

Unfortunately, in 1971-73 we were not acutely aware of the importance of proper data gathering and failed to record many facts which we needed. The data, thus presented, while not absolute statistically speaking, are significant, interesting and informative.

Of these 1,222 patients 50.2% were male and 49.8% were female; 913 were white, 308 were black and one was Oriental (Chinese). This ratio of Caucasian to non-Caucasian admissions was roughly 3:1, whereas when we began in 1971, the ratio was over 4:1. The average age was 61.9 years, which showed very little change from year to year (Fig. 1), whereas the length of stay has decreased dramatically since 1971 (Fig. 2).

This decrease in length of stay is due largely to our increasing expertise in treating this type of patient, but is due also to earlier referral of these patients, thereby preventing many of the time-consuming complications such as contractures, respiratory problems, decubiti and emotional inertia. Before the latter part of 1972 it was our feeling that patients bound for nursing homes or institutions would not be permitted, because of medicolegal difficulties, to employ their newly learned skills, such as transfers, bathroom ambulation or even independent ambulation

From the Lamar Unit of Baptist Memorial Hospital, 1025 E. H. Crump Blvd., Memphis, TN 38104.

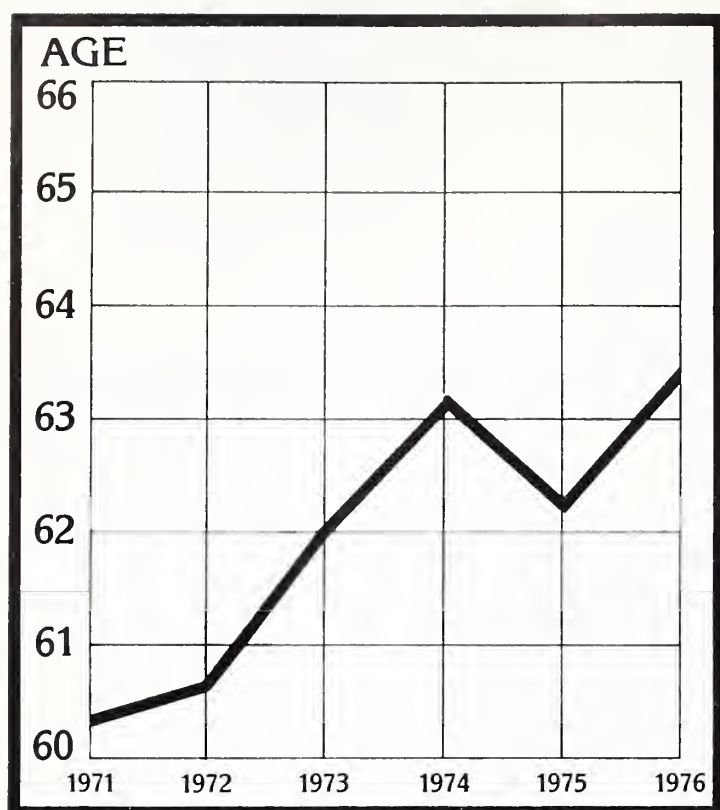


Figure 1

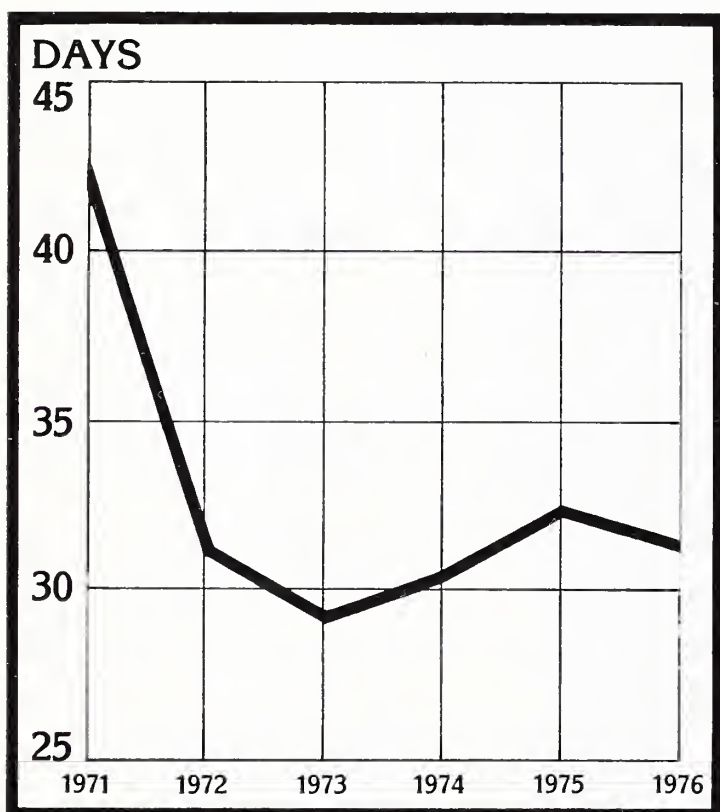


Figure 2

when possible, and were therefore not admitted to the unit if we were forewarned of their ultimate destination. We have been assured by extended care personnel that such is not the case and that any improvement in ambulation or self-care techniques decreases the need for skilled care, increases the patient's self-worth, and in

general promotes a more rewarding future for even the most severely handicapped. Some facilities in Shelby County accept only patients who are ambulatory and can perform most of their self-care skills (feeding, dressing, bathing, toiletry, etc.). Fortunately 79% of our patients returned home to families, relatives or friends, whereas only 16% were institutionalized either in private or public facilities. Five percent were lost to follow-up.

As would be expected, the great majority of our patients are referred from the Baptist Hospital attending staff (70%), but 12% come from other intown hospitals. In and out of town nursing facility referrals account for 12% of our patients, and outpatients (18%) also utilize our services. Many of our patients have had several admissions for subsequent strokes. Forty-nine percent had signs of right hemisphere involvement (left hemiplegia), 47% had left hemisphere involvement (right hemiplegia), and 4% had bilateral neurological deficits.

Communication disorders, usually but not always limited to the left hemisphere injured patients, consisted of speech problems in 39% of our patients and language problems in 38%. The educational level of our patients, although information is not complete because of failure of proper documentation, indicates that most finished at least the eighth grade of formal education. There were 204 college graduates (17%). Interestingly, of those who attended postgraduate school, physicians topped the list of hemiplegics (7), followed by engineers (4), lawyers (2), and dentists and architects one each.

The strenuousness of the program can be attested to by the fact that 87 of the patients (7%) refused to stay for their initial two-week evaluation; 6% were too sick to complete the program and were transferred back to their acute hospital setting. The most common causes of transfer were cardiovascular-respiratory (37), deterioration of neurological status (28), genitourinary (20), gastrointestinal (9), fever of undetermined etiology (4) and other nonclassified causes (21). Several patients had two or more complications simultaneously.

Many of our patients had medical problems in addition to their neurological condition which necessitated admission to the unit. Some were cardiacs with recent acute myocardial infarctions prior to their stroke, while 14% were diabetic. Surprisingly, only 28% were on antihypertensive

therapy. The controversy still rages concerning anticoagulants in completed strokes and many of our referring physicians are proponents. In our series, 23% of the patients were still maintained on anticoagulants or one of the many varieties of platelet inhibitors. In our opinion, the only real indication for anticoagulants in completed strokes is in the chronic fibrillator who has embolized.

Only 15% were on anticonvulsive medications. Dantrolene sodium, the new skeletal muscle relaxant, was used in 58 of our patients with inconclusive but generally unimpressive results. Eleven percent were admitted with decubitus ulcers and many with joint contractures—both unfortunate complications which can usually be prevented by proper range of motion and bed positioning during the acute phase of treatment. Both increase the length of stay, and thereby the cost of rehabilitation, to say nothing of the pain and inconvenience caused the patient. In spite of the numerous coexisting medical problems, we have had only 15 deaths (1.3%) in 1,135 patients who remained for treatment.

Ambulation, the ultimate early goal of all hemiplegics, is unfortunately not possible in all cases and the patient must adjust, mainly psychologically, to a wheelchair existence. Such was the experience in 22% (247 patients) in our series. In the remaining 888 (78%), ambulation was possible to some degree. Thirty-five percent were independent ambulators requiring no assistance whatsoever, whereas the remaining 65% required either supervision or varying degrees of human assistance to ambulate. The maximally assisted ambulator is usually able to walk with assistance to the bathroom and perhaps to meals. This, while not ideal, is certainly superior to a lifetime of bedside commodes and bed served meals. Thirty-four percent were household ambulators and 48% were considered to be safe ambulating in the community.

Four important deficits influencing ambulation are (1) balance and body image, both of which can be taught to be compensated for to some degree; (2) lower extremity motor function, which can be improved by therapy and bracing; (3) lower extremity sensation, which was involved in 48% of our patients, and which also can be compensated for with proper training; and (4) lower extremity range of motion, either active or passive, which was restricted in 5% of our series. As to lower extremity motor function, employing the seven stages of recovery by Brunn-

strom,¹ the majority (65%) of our patients fell into stages 3-4 and 5. Orthotic devices such as braces, knee cages, wedges, etc., were necessary in only 8% of our series, using the four criteria for short leg bracing, which are insufficient ankle dorsiflexion, mediolateral ankle instability, knee instability and proprioceptive loss in the lower extremity. These indications may appear singly but most often are seen in combination. Fifty-three percent required some sort of mechanical assistive device such as a cane, quad-cane/walk-cane, or walker.

Even though we had an extremely high overall ambulation rate, wheelchairs were required in 57% of our patients at discharge. In most, the length and time of ambulation was limited, mainly because of the ever present fatigue, of which little is known or written, but also because of other complicating medical problems in some. The vast majority (80%) of our patients at discharge were able to transfer (bed to chair, chair to commode, etc.) independently or with the minimal aid of some family member.

Self-care skills rival ambulation for the hemiplegic's attention. The degree of skill attained, like ambulation, can be graded as to the amount of assistance required to perform a certain task. Independence in feeding topped the list, 64% of our patients succeeding to this summit. This was followed by independence in dressing (52%), hygiene (44%), communications (37%) and lastly, household activities (11%). Just because the individual does not attain independence in a particular skill does not mean he cannot perform that skill with supervision or assistance.

Only 17% of our patients achieved complete independence in functional use of the upper extremity, but as with ambulation, many factors affect functional use. These again using Brunnstrom's seven states of recovery,² along with results of our series are (1) motor return, which was slightly lower (62% fell in stages 1-4) than that obtained in the lower extremity. Only 13% achieved complete independence in motor return. (2) Sensation, including position sense, sharp-dull sensation, stereognosis, light touch, temperature and texture, was impaired in 47%. (3) Shoulder subluxation (19%), upper extremity edema (16%), and limited range of motion (31%). (4) Hemianopsia (30%) and visual perception, which includes body scheme, vertical-

Continued on page 638

Enflurane and Epileptics

ALBERT L. MADUSKA, M.D.

Introduction

The use of enflurane anesthesia in man may be accompanied by a seizure pattern on the electroencephalogram and clinically apparent muscle activity.¹ This usually occurs at concentrations exceeding 1.5 MAC with accompanying hypocapnia. There is no evidence known to this author that cerebral oxygenation is threatened during the period of electrical seizure activity with proper anesthetic management and we are aware of no reports of disturbed cerebral function in the postanesthetic period which were felt to be related to enflurane induced seizure activity.² To this author's knowledge, no evidence exists that this seizure activity may be augmented by a patient's disease state. On the contrary, available evidence supports the contention that this is a common drug effect based on concentration and PaCO₂ levels.

The company literature accompanying enflurane lists seizures as a contraindication, and a panel in a recent anesthesia publication unanimously agreed that enflurane should not be used in patients with seizure disorders.³ Neither source lists any reference which suggests that seizure patients respond any differently from normals when exposed to a properly conducted enflurane anesthetic. In our department, seizures have not been considered an absolute contraindication to enflurane anesthesia; because of this we undertook to review a series of patients with idiopathic epilepsy receiving enflurane anesthesia for elective surgery without nondepolarizing muscle relaxants.

Report of Cases

Twenty-four patients with apparent idiopathic epilepsy were anesthetized with enflurane for elective surgery. All were on phenobarbital and

diphenylhydantoin and were reasonably well controlled. All patients had seizure disease of the grand mal type. Patients with petit mal or psychomotor seizures were eliminated from the review. All patients were normothermic prior to surgery and no patients presented with respiratory failure. All patients were induced intravenously with a thiobarbiturate. Patients were not monitored with an electroencephalogram, though they were observed for clonic motor movements or twitching. Fourteen of the 24 received succinylcholine for intubation. Ventilation was assisted by hand or controlled. Sporadic PaCO₂ measurements were not below 30 torr. Although induction concentrations were higher, maintenance concentrations were nearly always 2.0% or below.

No twitching or clonic activity was seen in this group of patients. Seizures were not seen with emergence or induction of anesthesia. No evidence of disturbed cerebral function attributable to anesthesia was seen in the postanesthetic period.

Discussion

This author is not endorsing or condemning the use of enflurane in epileptics, but merely reporting our experience. We feel seizure activity with enflurane is related to the circumstances of drug use rather than to preexisting patient disease. Our clinical experience to date with this drug in epileptics is reported to assist others who might have some need to use enflurane in humans with idiopathic epilepsy or other seizure disorders.

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From the University of Tennessee Center for the Health Sciences, Memphis, TN 38163.

The Tennessee Physician as a Medical Expert Witness—Free for the Asking or With Reasonable Compensation?

GARY J. BYRD, M.D.

Editor's Note: *Following is a well-researched paper on the economics of testifying as an expert witness. The reader should be aware that if he follows the author's advice he will be subject to contempt proceedings, as the author was. This has not yet been tested in Tennessee courts, and a test case would be in the making.*

This article is one of the products of three years of legal research at a cost of about \$25,000, in which the topic was "shepherdized" in every state of the union and the District of Columbia. This initial work involved some 50 plus attorneys. The product was further refined by consultation with leading medicine specialists from all sections of the United States. More than 50 textbooks and several hundred articles were reviewed.

The author is a specialist in forensic medicine and has testified as a medical expert witness in several hundred cases. He withheld expertise as described in the article, was held in civil contempt of court, and using the exact method described in the article, prevailed in his challenge.

Since his successful challenge, physicians in Houston have uniformly been paid a negotiated fee for their testimony.

Again, be warned, if you are tempted to follow his lead. The law needs to be tested in Tennessee, so go into it with your eyes open, prepared to accept the consequences.

With the marked increase in medically related cases, practicing physicians are being called into courts of law to serve as expert witnesses in constantly increasing numbers. In some instances the physician called is a specialist in legal medicine and thus well prepared for the task. More often the physician being sought is primarily a clinician who may be unfamiliar with the courtroom and unaware of his rights and duties as a medical expert witness.

The current status of the law in Tennessee will be given; the various alternatives which are available to the physician who has been called to be a medical expert witness will be examined; and the basic rights of physicians under the United States Constitution will be given.

¹From the Baylor College of Medicine, Department of Psychiatry, Texas Medical Center, Houston, TX 77030.

A witness in a court of the law may serve as a witness to fact in which case he primarily provides direct responses to questions asked by the trial attorneys concerning factual matters which are in dispute. In contrast, an expert witness may do one or more of the following: (1) review facts and express opinions; (2) come to conclusions; (3) comment on hypothetical situations; (4) review and explain technical procedures to the jury; (5) insist upon clarification of a question or upon a modified response in situations where a simple yes or no answer to a question could be misleading.

Statutory fees for witnesses are provided by Tennessee state law. However, there is no provision in the law for extra compensation for expert witnesses.¹

Refusal to answer as a witness may be pun-

EXPERT WITNESS/Byrd

ished as a contempt of the court in which the action is punished.²

A subpoenaed witness who fails to appear in court forfeits \$125 to the party in whose behalf he was called, and he is liable for all damages resulting from lack of his testimony.³

The testimony of a medical expert witness is based on his education, specialized training, and clinical experience. In some jurisdictions expertise of this nature has been regarded as being equivalent to property. A Pennsylvania ruling states that "the private litigant has no more right to compel a citizen to give up the product of his brain than he has to compel the giving up of material things."⁴ The right of the expert witness to be reasonably compensated has been decided by a state supreme court ruling in ten states: Colorado,⁵ Florida,⁶ Illinois,⁷ Indiana,⁸ Iowa,⁹ Kansas,¹⁰ Nebraska,¹¹ New Jersey,¹² Pennsylvania,¹³ and Rhode Island.¹⁴ In each of these decisions, except Nebraska, the absolute right of an expert witness to be paid for his time and knowledge was affirmed.

As the knowledge, expertise, and training of a Tennessee physician are in all likelihood his personal property, then if he is forced to convey this property in the form of expert medical testimony without proper compensation he would have been deprived of his property without due process of the law. This would violate his rights as secured under the 14th Amendment to the United States Constitution. As an alternative, should the physician refuse to testify as an expert witness on the grounds that he does not choose to work under the circumstances he could raise the 13th Amendment to the United States Constitution which prohibits involuntary servitude. Thus, the physician may not be involuntarily impressed into the service of the state.

Then either if he simply did not want to be involved or if he had been ordered to be an expert witness without fair compensation, the physician could appear in court and refuse to testify after explaining his reasons. When faced with the physician's refusal to testify the presiding judge may cite the physician for contempt of court. The two types of contempt are criminal contempt and civil contempt. In criminal contempt citations the individual is cited for a transgression which has occurred and the individual may be punished by a fine or incarceration or

both. In a civil contempt citation, the individual is usually cited for that which he has failed to do: specifically to comply with an order of the court, and the punishment is limited to incarceration. The expert witness who is in this particular situation, according to the United States Supreme Court in *Gompers vs. Buck's Stove and R. Co.*¹⁵ carries with him the keys with which he may unlock the jail at any time simply by yielding to the demands of the court.

This would seem to place the physician expert witness at the mercy of the trial court. There is an alternative, however. In order for a judge to legally cite a witness for contempt and order him jailed until he complies with the demands of the judge, it is essential that those demands be reasonable and that the judge have specific authority in the law to make such demands. If the medical expert witness should believe that the court cannot meet these requirements then he can test the validity of the contempt citation collaterally by way of an application for a writ of habeas corpus. This would establish a test case which could be appealed to a higher court. Upon review in the higher court, should Tennessee state laws conflict with the rights guaranteed the physician expert witness under the United States Constitution then the former would have to yield to the latter.

Prior to a specific ruling from a Court of Appeals in Tennessee, a possible alternative would be for the local bar associations, medical societies, and judiciary to design a mutually acceptable method of fairly compensating the Tennessee physician for serving as a medical expert witness.

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An Evaluation of the Roll-Over Test

R. DANIEL BRAUN, M.D., and ALFONSO E. BARNES, M.D.

In 1974, Gant et al¹ reported on a clinical test for predicting the development of acute hypertension of pregnancy which they referred to as the supine pressor test. Since that time, it has been popularly referred to as the "roll-over" test. This evaluation of the roll-over test was undertaken because if further extensive study verified the original results, this simple clinical test which can be performed anywhere with a minimal amount of equipment would predict patients who would develop toxemia of pregnancy. Armed with these data, we could select patients for testing various forms of preventive therapy, and perhaps in the very near future we would be able to prevent toxemia.

Materials and Methods

One hundred and six normal gravidas, 57 primigravidas and 48 multiparas, between 28 and 32 weeks' gestation were chosen at random from the Baroness Erlanger Hospital Obstetric Clinic. All patients were followed in the obstetric clinic in the routine manner. Diet control and sodium restriction were not imposed. The head nurse in the obstetric clinic performed the test using the exact technique described by Gant. That is, the patient was placed in the left lateral recumbent position and auscultatory blood pressure measurements utilizing the first and fifth sound of Korotkoff were obtained at five-minute intervals until a constant baseline diastolic blood pressure was established. This required a minimum of 15 minutes and a maximum of 35 minutes.

When the constant baseline had been achieved, the patient was told to roll over to the supine position and the blood pressure was again measured immediately and also five minutes later. If the diastolic blood pressure increased 20 mm of mercury, the test was considered positive. The results of this test were recorded only in a book which was kept by the clinic nurse, and the results were not made known to the clinicians managing the patients.

From the Department of Obstetrics and Gynecology, University of Tennessee College of Medicine, Clinical Education Center—Chattanooga, Chattanooga, TN 37403.

Dr. Barnes is now with the University of Cincinnati.

The clinician who managed the patient made the diagnosis as to whether or not the patient had been hypertensive. For the purposes of the study, hypertension is defined as a blood pressure increased to at least 140/90 mm of mercury, accompanied by an increase of the diastolic blood pressure of at least 20 mm of mercury above previous levels during the pregnancy. At the completion of the study, the clinic nurse turned her record book over to the investigator who then correlated the results of the roll-over test with the outcome of the patient.

Results

Of the 106 roll-over tests performed, 35 were positive and 71 were negative. Of our 106 patients, 26 (24%) developed hypertension according to our previously mentioned definition.

TABLE 1

	Positive Tests	Negative Tests
Hypertension	15	11
Toxemia	10	6

Looking at these 26 patients (Table 1) only 15 had positive tests, while 11 had negative tests.

Sixteen patients had classic preeclampsia with albuminuria, edema, or hyperreflexia in addition to hypertension. This is 15% of the whole group and is equal to the average incidence of toxemia in our clinic population over the last year. Of these 16 patients, ten had a positive test (seven primigravidas and three multiparas) while six had a negative test (five primigravidas and one multipara).

TABLE 2

	Primigravidas	Multiparas
Positive Tests	13	22
False Positive	6 (46%)	14 (64%)
Negative Tests	44	27
False Negative	8 (18%)	3 (11%)

Looking at the positive tests (Table 2) 20 of the 35 (58%) did not develop hypertension (six primigravidas and fourteen multiparas), while 15 (42%) did become hypertensive. On the other hand, 60 of the 71 (85%) patients with negative tests did not develop hypertension, while 11 (15%) did develop hypertension.

ROLL-OVER TEST/Braun

The total number of correct predictions was 75 of 106 (71%). Dividing our group into multiparas and primigravidas, there were 43 of 57 (75%) correct predictions in primigravidas and 32 of 49 (66%) correct predictions in multiparas.

Discussion

From this, it can be seen that if we had used the roll-over test as a predictor on our patients, we would have predicted that 35 (33%) of them would develop hypertension. In reality of this 35, only 15 of the 26 patients who developed hypertension were identified. This means that only 57% of those patients with hypertension were identified in the group of one third of the entire population.

While looking at it from the other side, 11 of 71 (15%) of the patients with negative test did develop hypertension.

It is obvious from our results that we have not been able to equal the 93% accuracy for

a positive test or the 91% accuracy for a negative test reported by Gant and co-workers.

Conclusion

In our OB population, toxemia is a severe disease. Over one half of our perinatal mortality is associated with toxemia. It therefore would have been very helpful to our practice if we had verified the Dallas work.

However, utilizing the exact technique described by Gant et al, we have not been able to duplicate their results. While we realize that this is not a large series of patients, we do feel that it is large enough to be significant; however, we are continuing the work at the present time and would hope to report at a later date on a much larger group of patients. We also eagerly look forward to seeing the results of other investigators around the country.

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Hemiplegia . . .

Continued from page 633

horizontal perception, form consistency, directionality, visual-motor coordination and, spacial relations, 15%.

Slings, either of the walking or overhead type, were advised in 15% of our discharges. Splints, usually of the resting hand or cock-up types, were employed in only 7%.

Outpatient therapy was recommended in only 18%, due largely to the inaccessibility of transportation and the scarcity of qualified physical, occupational and speech therapists in the rural areas.

One rehabilitative modality which is increasing in use is rehabilitative surgery. Surgical intervention for correction of joint and tendon contractions, the elimination of painful and/or frozen joints and for procedures such as neurolysis and neurectomy is increasing in popularity. Our experience with this modality is extremely limited but hopefully will broaden in the coming years.

Motivation, that elusive attribute which can neither be borrowed, bought, inherited nor wished

for, is the hallmark of successful rehabilitation. Motivation encompasses acceptance. So often the handicapped masters the arts of ambulation and self-care only to find himself consumed in hopeless frustration because of his inability to accept his disability. Successful rehabilitation requires psychological acceptance of and adaptation to the limitations imposed by the handicap. Depression, a common emotional state in hemiplegic patients, can best be decreased by early mobilization, visualization of others less fortunate, and hard work. Surprisingly, in our series we have had only one suicide in 1,135 patients (0.9%).

In some small way we hope that this synopsis has contributed to your knowledge of hemiplegia, and that with knowledge comes understanding. It is our hope that with that understanding these individuals can be helped to live out the remainder of their lives in dignity and contentment.

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The Foggy Crystal Ball: A Look at Mandatory Continuing Medical Education

JOHN B. THOMISON, M.D.

In spite of all that has been written and said about continuing medical education (CME) and the administrative and educational process, there is an appalling lack of knowledge about it, even among people who should know. This is about CME—where we are and where I think we are going, as much as I can tell where it looks like we are going. The complexion of things has changed in the past year or so, and for a more detailed account of that I refer you to an earlier article I wrote.¹

Because of the confusion over the accrediting process, I am going to review it briefly. It is much oversimplified, and does not pretend to consider all the ramifications. Until this July, accreditation of CME was carried out through the AMA Council on Medical Education. All other medical education accreditation (undergraduate and graduate) was carried out through the Coordinating Council on Medical Education (CCME) through its liaison committees, the Liaison Committee on Medical Education (LCME) and the Liaison Committee on Graduate Medical Education (LCGME). On July 1, accreditation of CME went under the Liaison Committee on Continuing Medical Education (LCCME). The LCCME is formed of representatives from the five parent organizations of the CCME: the AMA—four representatives; the Association of American Medical Colleges (AAMC), the American Hospital Association (AHA), the American Board of Medical Specialties (ABMS), and the Council of Medical Specialty Societies (CMSS)—three rep-

¹Chairman, Tennessee Medical Association Committee on Continuing Medical Education.

representatives each. Each of these has veto power. Also represented are the Association for Hospital Medical Education (AHME—directors of medical education in large hospitals), the Federation of State Medical Boards (FSMB)—one representative each; and finally one representative from the public and one from the federal government.

There is a great deal of suspicion all around. The state medical associations' CME committees feel they should have a voice in the LCCME, and the chairmen of the state committees have formed

a presently loose organization to that end. It is, after all, the state committees who are doing most of the leg work in the accreditation process. The LCCME, on the other hand, and particularly the AAMC, is suspicious of the state organizations—that they are sloppy and recommend accreditation of programs which should not be accredited. Representatives of the state organizations will begin in September to attend LCCME meetings as observers,

beginning with the first three states to be approved for accreditation: California, Tennessee, and Pennsylvania, plus Virginia.

The AMA is opposed to adding another organization to the LCCME because the committee is already so large as to be unwieldy, and they feel the state societies are adequately represented through the AMA members. The state committees do not agree.

As a final touch, the Federal Trade Commission has stated it is in conflict of interest to allow an organization or group to accredit itself, and has said medicine should not be allowed to accredit its own educational institutions. I must



ask, "Who else is qualified to pass on medical education but those who either do it or use it? Just who do they have in mind?" The answer—you guessed it. We may get to 1984 before 1984!

And so continuing medical education rolls on.

The feeling is spreading that we may have created a monster. Exactly who "we" is, is by no means certain. And though his exact size and shape are hard to make out, I doubt the monster can be killed. But we may be able to stunt his growth. The monster is *mandatory CME*.

It has been about ten years since President Johnson's "blue ribbon" commission on health manpower made its famous report containing the unfounded and libelous accusation that doctors were endangering the public welfare, as after graduation from medical school they never learned anything new, and were therefore depriving the public of advances in medical knowledge.

Reaction to the report did not stop with the usual disclaimers that doctors have always continued their education as long as they remain in practice. With a few glaring exceptions that are often highly visible, this certainly is true. The AMA Board of Trustees saw by the handwriting on the wall that in some circles at least we had been found wanting, and by setting about to shore up continuing medical education, we got the jump on the feds. Barely.

Historically, the medical schools had for the most part turned their backs on postgraduate education. Their few sorties into the area had, with a few exceptions, such as the University of Kansas, proved a waste of time and effort. The problem, of course, was that little attention was paid to the actual needs of the practicing physician, and the faculty generally was not interested either in finding out those needs or in doing the necessary work. The physician gained his education by his own efforts—reading journals, consulting his colleagues, and attending meetings. Mostly, it served him and his patients well. The problem was with the few who neglected it.

The problem still exists. It will not be cured by much of anything in CME, because those problem doctors will just log in their hours and play golf. Only the requirement of a challenge examination has a chance to make any impression on that group, and that has been determined to be a poor method of assessing physician competence. It says nothing about how the doctor cares for his patients, which is a function of the medical audit, and in that sense the audit is a good educational

tool as well as a disciplinary "stick" for those few who need it.

Once started, the CME snowball picked up not only momentum but also a lot of accretions. It is the accretions which form the monster.

The Oregon doctors, for reasons I do not know and which probably are not germane, determined that a certain number of CME hours should be required for membership in the Oregon state association, and at about the same time the AMA had decided it would be nice to give an award to physicians who completed 150 hours of CME in three years. Some other medical associations, and then some legislatures and specialty societies got into the act, and mandatory CME became a reality.

Why did it?

Professions are by definition elitist. They were originally limited to medicine, the law, and theology. Implicit in the term is the idea that professional men know about the subject they profess, and the laity do not. The term came to be expanded in scope to include classes of people originally designated artisans and, later, technicians. The idea that a professional person would not desire to remain the most knowledgeable person around in his particular field is totally foreign to the term "professional" as it is defined, so in the sense that he has to be coerced into doing what he must do to remain professional is a derogation of both the term and the position. Perhaps that stricture is a natural outgrowth of expanded scope.

Just who thinks doctors are wanting in scholarship and interest? Is it the public? Public opinion polls indicate physicians as a group are still held in highest regard. If it is not the public, who then? Legislators? At least in some instances, apparently so. "Doctor watching" in the form of PSRO began in reality as a cost containment measure, but in order to avoid appearing crass and unfeeling, the involved senators and congressmen insisted they were really interested in "quality" of care, and that maybe improved care might save money—but that was only incidental.

Early discussion in CME conferences—say eight or ten years ago—centered around motivation. "How do you motivate doctors to continue their education? Do you use the carrot or the stick? And what is the carrot? What is the stick?"

Now there is of course nothing wrong with CME. It is both necessary and desirable. Generations of physicians have witnessed to this fact.

And the information explosion of the past few decades has complicated the education process tremendously. But somewhere along the line we have been led down a primrose path (though I do wish to state that both your own CME Committee and the TMA Board have steadfastly opposed mandatory CME in this state). Benjamin Wells, M.D., director of CME at the University of Alabama in Birmingham, has written several penetrating articles on the subject, and while I am not in agreement with his every conclusion, I think in general his head is screwed on right. In commenting that some random items he had assembled in an editorial entitled "CME—Pro and Con"² did not really hang together, Dr. Wells says, "There is not a logical flow from one to the other. But this is characteristic of life and real experience. When things begin to make logical sense, you can be sure that someone, usually a politician or a do-gooder, is constructing a scenario that you are expected to believe. Ten to one you will believe it as soon as the facts are sufficiently distorted to make the fiction look good."

I am afraid this is where we are right now with CME. Too close inspection of how the scenario got constructed or who constructed it would be at best unfruitful, and I suspect actually counter-productive. Quite likely all of us who have had a part in CME have been accomplices to some extent, mostly unwitting. The fact of the matter is, though, that this is where we are, and we are going to have to live here. We just need to make as sure as possible that we handle the situation in the best possible way.

The problems of medical care are due in part to a general lack of knowledge, in part to the lack of dissemination of the knowledge which is the property of a few experts, in part to the difficulties in the application of the knowledge we have, in part to imponderables, and in part—a very, very small part—to the indolence, greed, and/or callousness of a few members of the profession. CME speaks to the second item *only*, and mandatory CME to the last and by far the smallest part of the problem. Many other elements are involved to which CME does not speak at all, and yet the federal bureaucracy and sometimes the medical and commercial establishments behave as if it does and that all we have to do to solve all the nation's health care problems is to be sure every doctor gets 150 hours of CME every three years and possibly takes a recertifying examination.

Dr. Wells has pointed out that not only must real needs be identified and met by carefully devised educational experiences, and the results tested and evaluated (none of which we yet know how to do very well), but that we are just beginning to realize that the most critical deficiencies of health care are not those that relate to lack of knowledge or skill. There are those which he says can best be described as behavioral, and concern the overall logistics of health care: the organization of services; the optimal use of allied and subprofessional support; patient orientation, education, and motivation toward disease prevention and self-care; the economical and safe use of diagnostic and treatment procedures; and a host of similar topics. These have emerged only in recent years, and we are poorly prepared to teach them. We are, he says, for much of truly relevant CME, still looking for the ballpark.

In a previous paper,³ Dr. Wells addressed several other problem areas associated with CME. I will touch on them briefly, with some comments. The first is that there are two basic misleading but highly persuasive implications in the presentation of formal courses in CME. These are that knowledge conveyed in courses is somehow certified as correct, and the corollary that "certain groups and individuals know how to practice medicine, and their methods should be immediately transferred to the large body of physicians who do not know how to practice medicine." He points out that this "town-gown" distinction is unsupported and indeed unsupportable in this present generation, and is certain "to produce antagonism if not downright hostility toward much of continuing medical education."

In fact, says Dr. Wells, "we do not even know how to teach beyond the graduate level. CME is demonstrating that we can indeed teach an old dog new tricks, but it is really hard to find a teacher who knows more than the 'old dog,' and we have so far found no way of measuring his improvement. CME remains essentially experimental." Any experienced teacher knows that when a "topic expert" expounds on the state of his art from the podium, 90% of his words "fall soundlessly between the chairs of a nonparticipating audience."

There are two other schools of thought: one thinks of CME in terms of hardware; the other is busily designing "huge libraries of software designed for the painless conveyance of knowledge and skills. Under the threat of mandatory

CME we have been overly concerned with the *process* of education. . . . We have been so busy keeping score that we may forget to play the game. . . . Learning is a private and highly individualistic matter into which teachers may seldom penetrate. Learning is an independent process which is subject to no external mandate. . . . True learning begins with an individual desire and individual insights into one's own needs, and individual resolution followed by self-discipline and self-responsibility. Teachers, if they are needed at all, only supply a measure of stimulus, select the pages, and change the slides.

Dr. Wells has summarized the situation quite well, as far as he goes. There are some other accretions in the snowball, though, which need attention, and these are impinging increasingly on the consumers of CME. That's us.

Willie Sutton had been a robber of banks for years when he masterminded the famous Brinks robbery. When he was finally caught, psychologists were enthralled by the notion that they would gain some insight into what makes bank-robbers tick. In answer to the simple question, "Willie, why do you rob banks?" came the simple answer, "Because that's where the money is." This became known as Sutton's Principle. It is followed by many people and groups—by most of us, consciously or un-, to some extent. It is being applied very successfully to CME.

The magic word is "cost." If carried to its logical conclusion it could consume a pretty good chunk of the gross national product. A number of commercial ventures have arisen with an eye toward the CME market, offering cruises, safaris, and what have you. Some of the courses being offered are incredibly expensive.

I do not wish to accuse anybody of anything, but it is a strange coincidence that there are those in the AAMC who affirm that only the medical schools, which over the years have eschewed CME as a waste of time and effort, are capable of carrying out acceptable education programs. In addition, all the aforementioned cruises—at least those approved for Category 1—are manned by university people in lavish accommodations for which the participants pay. Much of the impetus for mandatory CME came from the medical

educators, and I suspect the momentum has been generated by them as well.

A question which desperately needs answering, though, is this: When everyone is required to have a certain number of hours of CME, and perhaps examinations, where will we put all the reluctant, rebellious students, and who will teach them? The one who will ultimately bear the burden for all this expense and effort is the patient, as more and more of the doctor's time, energy, and money goes into the education process, much of it unnecessary and of little or no value.

The AMA and your own Board of Trustees and CME Committee went into this program with the notion that most of the physician's educational needs could be met close to where he practices, based on his own perceived needs and desires, and at little cost. The fear is that mandatory CME and the requirements of the LCCME will change all that.

A certain amount of cynicism about the education process is already detectable, and it is growing. Already there is visible an effort to get the most Brownie points for a minimum of effort. Our objective, to bring about a change in practice habits, must be wholly acceptable to the individual doctor, otherwise we are wasting our time and a great deal of money.

Dr. Wells, who, mind you, is a long-time medical educator, ends his aforementioned editorial with the statement that "We must give increasing weight to the experience and opinions of practicing professionals as opposed to academic specialists and professional teachers," as well as "keep the system open, flexible, and voluntary. Not one of us is yet qualified to impose his views on the rest of us."

To which I can only say, Amen. I'm not sure, though, that the establishment will buy it. We had best gird up our loins for a hard fight, or else drink the hemlock.

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Cholestyramine Treatment of Intractable Diarrhea

CHURKU MOHAN REDDY, M.D., SABURO HARA, M.D., and E. PERRY CRUMP, M.D.

Cholerheic enteropathy is characterized by diarrhea and cramps resulting from excessive amounts of bile salts in the colon.¹ Cholestyramine is a quaternary ammonium anion exchange resin with a strong affinity for bile salts.² Its oral administration has been beneficial in the treatment of diarrhea associated with ileal resection or bypass,³ irritable colon syndrome⁴ and acquired hypogammaglobulinemia.⁵ Seven infants with persistent nonspecific diarrhea have been successfully treated with a brief course of oral cholestyramine therapy.⁶ Berant and Associates⁷ treated 20 infants with intractable diarrhea of infective as well as of unknown etiology. A dramatic response to cholestyramine resin in two adult patients⁸ and in a 6-month-old infant⁹ with pseudomembranous colitis have been reported.

This communication describes an additional case of an infant with intractable diarrhea who responded to cholestyramine therapy.

Case Report

A 6-month-old white male infant of 40 weeks' gestation with a normal delivery was admitted to Hubbard Hospital on Feb. 12, 1977. Admitting complaints included a three-week history of diarrhea which did not respond to oral administration of electrolyte solution and variable strengths of milk formulas suggested by his doctor. He continued to have watery stools 10 to 12 times per day prior to admission. He lost about 1.4 kg over a period of three weeks. Upper gastrointestinal series with barium were done by a private physician and reported as normal.

At the time of admission the infant was noted to be irritable, with a temperature of 36.8 C and weight of 7.6 kg. He was in poor nutritional status and was severely dehydrated. Eyeballs and anterior fontanel were sunken. Skin turgor was poor. On admission, blood chemistries were as follows: Serum sodium 119 mEq/L, potassium 3.8 mEq/L, Co₂ 20 mEq/L, chloride 76 mEq/L, total protein 5.6 gm/dl and albumin 3.8 gm/dl. Serum calcium, phosphorus, alkaline phosphatase, glu-

cose, glutamicoxaloacetic transaminase, BUN, uric acid and cholesterol were normal. The peripheral WBC was 8,100/ml, with segmented neutrophils 44%, and lymphocytes 56%. Hemoglobin was 12.2 gm/dl. The admission lumbar puncture revealed a clear cerebrospinal fluid with 2 WBC/ml. The protein was 89 mg/dl and a CSF glucose of 59 mg/dl with a concomitant serum glucose of 85 mg/dl. Subsequent cultures of the blood and cerebrospinal fluid cultures revealed no growth for bacteria.

Stool cultures were repeatedly negative for bacterial and parasitic pathogens. Stools for reducing substances were repeatedly negative and stool pH was neutral.

He was initially managed with intravenous fluids and continued to require massive amounts of fluid and electrolytes intravenously to replace stool losses. Over the next four days, he had an average of 12 watery stools daily. Then cholestyramine 2 gm was given orally at eight-hour intervals for seven days. Within 24 hours, the number of stools decreased to four and became pasty. He began passing normally formed stools within 36 hours, oral feedings were gradually initiated and parenteral fluids were discontinued. Cholestyramine was discontinued over the next three days. The infant was discharged after a two-week hospital stay on a regular diet and in a satisfactory condition. He was subsequently followed in the office and he is doing well without re-appearance of diarrhea.

Discussion:

The terminal ileum has been shown to be the major site of bile acid reabsorption.¹⁰⁻¹² If this portion of the bowel is resected, bypassed or diseased, increased amounts of bile acids reach the colonic lumen.¹³ Bile salts in the large bowel decrease water and glucose absorption, augment large intestinal mobility, or increase the secretion of water and sodium by the colonic mucosa.¹³ Cholestyramine has been shown to bind bile acids² and endotoxins.¹⁴ It may act through binding of endotoxins or bile acids in the intestinal lumen, thus allowing time for recovery from injury to intestinal mucosa. In the above case, the infant continued to receive massive amounts of fluids and electrolytes. Probably he might have secretory diarrhea, even though detailed studies were not done.

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Digitalis Intoxication

CHARLES E. KOSSMANN, M.D., Editor

JAMES G. PORTERFIELD, M.D.:

This 77-year-old black man was admitted on March 15, 1976 with the chief complaint of three episodes of dizziness over the previous four days. They occurred suddenly without relation to position or activity and were not associated with loss of consciousness.

The patient was thought to have atherosclerotic heart disease manifested by premature systoles and some electrocardiographic abnormalities. Symptoms of diminished cardiac reserve were said to have begun in 1960. He was placed on digitalis and a daily diuretic at that time with minimal or no improvement of symptoms. Nevertheless he was kept on the medication irregularly thereafter. In the next 16 years he was followed in the cardiac clinic with little or no progression of his disease. In 1965 he had an appendectomy and a prostatectomy (transurethral) without incident. In 1974 he had a pneumococcal pneumonia, uncomplicated. He had smoked a pack of cigarettes daily for 30 years. Digoxin 0.25 mg, P.O., q.d. was begun again on Jan. 12, 1976 and diuretics were continued as before. The serum potassium was 4 to 5 mEq/L on several determinations. He had atypical chest pain on several occasions and was felt to have had small coronary closures in the course of his disease. On the present admission he also complained of dyspnea on exertion on walking one block or on climbing one flight of stairs.

On examination the pulse was 42 beats per minute and regular with premature systoles. The blood pressure was 130/80 mm Hg. He was well nourished and well developed and in no acute distress. He was oriented for time, place and person and displayed good mentation and appropriate affect. The pupils were round and reacted to light and accommodation and the extraocular muscles were intact but the retinae showed a fairly advanced degree of arteriolar sclerosis. Signs of congestion of the circulation were limited to distention of the jugular veins, bilateral small inspiratory rales in the lungs, and a trace of pretibial edema. The heart was slightly enlarged with the first and second sounds normally split. There was a third sound audible at the apex.

Laboratory studies were as follow: Hematocrit 40%, WBC 7,100 with 76% polymorphonuclear leukocytes. The blood glucose was 111 mg/dl and the BUN 24 mg/dl. Serum potassium, sodium, bicarbonate, and chloride were 5.5, 140, 29 and 106 mEq/L respectively. The electrocardiogram showed sinus bradycardia with an angle alpha of approximately minus 30° in the frontal plane, and there were some premature ventricular systoles. There was relatively high voltage of QRS with depressed S-T segments and inverted T waves in leads from the left side of the precordium such as seen with left ventricular hypertrophy. The x-ray of the chest showed some atherosclerosis of the aorta and minimal enlargement of the heart. A serum digoxin

level on March 16, 1976 (the day after admission) was 2.4 ng/ml (normal 0.5 to 2.0 ng/ml).

The digoxin was discontinued and within three days the heart rate increased to normal values and symptoms of cerebral ischemia subsided. But in view of the apparent evidence of sick sinus syndrome, the patient was considered for a pacemaker and this was subsequently inserted.

It was the impression that the patient's dizziness was on the basis of the sinus bradycardia secondary to atherosclerotic ischemic disease of the sinoatrial node and serum digoxin above the normal therapeutic range. The plan was to re-evaluate the digoxin dosing regimen based on the patient's renal function and the measured level of digoxin that resulted from the previous dose of 0.25 mg daily.

ARTHUR B. STRAUGHN, Pharm. D.:

Several prospective and retrospective studies in recent years have shown the incidence of toxicity to digitalis glycosides to range from approximately 10% to 35%. In these studies, the mean toxic serum concentration for digoxin ranged from 1.7 ng/ml to 5.7 ng/ml. In two studies by Jelliffe and Ogilvie,^{1,2} the incidence of toxicity to digoxin in hospitalized patients was 35% and 23% respectively. After a program was begun in which the housestaff was taught how to administer digoxin using pharmacokinetic principles, the incidence of toxicity was reduced by half. A review of serum digoxin levels in the City of Memphis Hospital by a doctor of pharmacy resident revealed that over a period of six months 35% of all the levels of digoxin were greater than 2.0 ng/ml. This does not mean that 35% of the patients were toxic, because it was not known why the serum levels were ordered, but it does indicate that many patients displayed levels often associated with toxicity.

The contemporary approach to prescribing digoxin involves the utilization of pharmacokinetic principles. Pharmacokinetics is not an esoteric mathematical science that requires the use of sophisticated computer systems but is a valuable clinical tool that can be used by therapists with a minimum of mathematical background. Briefly defined, pharmacokinetics is the study of

City of Memphis Hospital Case #022730.

the body's action on drugs. It is the quantitative study of the rates at which the body absorbs, distributes, metabolizes and excretes drugs. In the clinical application of pharmacokinetics, the body is regarded as a mathematical model which allows drug levels at specific times during the dosing interval to be estimated. When using pharmacokinetics clinically it is assumed that there is a relationship between the drug level in the serum and the pharmacological response in the individual patient. For example, the optimal therapeutic response with digoxin in patients with uncomplicated congestive heart failure is usually achieved with levels between 0.5 ng/ml and 2.0 ng/ml.

Pharmacokinetics is a relatively new discipline and has become of value clinically only with the development of specific and sensitive assays for the measurement of drug levels in biological systems. Ideally, the way to characterize the pharmacokinetic parameters of *absorption*, *distribution*, *metabolism* and *elimination* in a patient would be to measure multiple serum levels over a single dosing interval but with digoxin this would be costly and in most cases impractical. (The cost of determining one digoxin level in this institution is approximately \$20.) Therefore, the essential pharmacokinetic parameters must be estimated from the patient's physiological status. For example, the rate at which digoxin is eliminated from the body has been shown to be related to the patient's renal function. Thus the half-life* of the digoxin may be estimated from the patient's creatinine clearance (v.i.).

Essentially, pharmacokinetics is a tool that may be used in a clinical situation to *estimate* serum drug levels resulting from a specific dosing regimen. It must be emphasized that pharmacokinetics, like any other clinical tool, must be utilized as part of the overall decision-making process involved in developing the patient's pharmacologic management. The final decision regarding the patient's drug therapy should be based on all clinically relevant parameters. For example, pharmacokinetic analysis of a patient's digoxin therapy might estimate the serum levels to be in excess of 3.5 ng/ml, but even if the measured levels are in agreement, there would be no need to change the therapy if the patient was respond-

ing satisfactorily without clinical toxicity.

In a patient receiving digoxin, the most meaningful serum levels are usually those obtained at the end of the dosing interval just before the next dose. A recent study conducted by a doctor of pharmacy resident evaluated the usefulness of digoxin levels ordered in the City of Memphis Hospital. He determined that only 10% of the levels were of real clinical value because the times at which the serum samples were obtained and the dosing regimen of digoxin at the time the samples were obtained were unknown. It was not possible from these levels to suggest a better course of therapy because of inaccuracies in collecting the data. Obviously, many patients enter the hospital with an unknown digitalis dosing history. A serum level in these will aid in determining compliance or in confirming toxicity, but in order to maximize the use of serum digoxin levels, dosing history and sampling times are of the utmost importance.

Dr. McGraw is going to discuss the pharmacokinetic techniques used in evaluating and developing digoxin dosing regimens.

BENJAMIN F. MCGRAW, Pharm. D.:

The four essential pharmacokinetic parameters used to evaluate digoxin therapy are absorption, distribution, metabolism, and excretion.

Absorption

The *absorption* of the digoxin (Lanoxin) tablets is approximately 60%; of the elixir approximately 80%. I am referring to the Lanoxin brand of digoxin in this discussion because recent literature indicates that the absorption of other brands of digoxin are quite variable.³

Burroughs Wellcome has recently revised the dosing recommendations for digoxin.⁴ This is not because of a change in formulation of the digoxin tablets; they are no more bioavailable than previously. The new recommendations are the result of pharmacokinetic and pharmacologic studies that indicate most patients actually need less drug in the body than was previously thought.

The amount of digoxin absorbed becomes clinically important when switching a patient from intravenous to oral therapy or the reverse. The dose must be increased or decreased by approximately 40% to maintain the same effect. The absorption of intramuscular digoxin has been shown to be erratic, and this route of administration is also painful. It is recommended that

*The half-life or half-time ($t_{1/2}$) of a drug (also called the elimination half-time) is the unit of time in which 50% of it has been eliminated from the body. For digoxin the $t_{1/2}$ is approximately 44 hours in patients with normal renal function.

intramuscular digoxin not be used unless other routes of administration are impractical.

Distribution

The next pharmacokinetic parameter to consider is *distribution*. The actual term used to describe distribution is "apparent volume of distribution," or "Vd." It is an abstract term used to describe the relationship between the amount of drug in the body and the serum concentration and is expressed as a ratio of the two:

$$Vd = \frac{\text{Total amount of drug in body}}{\text{Concentration of drug in serum.}}$$

Stated another way, apparent volume of distribution is that volume of fluid which *appears* to be necessary to dilute the amount of drug present in the body to yield the concentration seen in the serum. The volume of distribution for digoxin changes with the patient's renal function. A patient with normal renal function has a volume of distribution of approximately 7.3 L/kg of lean body weight. A nephritic patient with a creatinine clearance of 25 ml/min/1.73 m² or less will have a volume of distribution of only 4.7 L/kg or 65% of what is found in a patient with normal renal function. Our studies at the City of Memphis Hospital have shown that patients with creatinine clearances between 25 and 50 ml/min/1.73 m² have a volume of distribution of about 6 L/kg. When evaluating volume of distribution it should be remembered that digoxin distributes into lean body tissue. A patient with considerable adipose tissue should be dosed on the basis of lean body weight.

The volume of distribution also changes in certain disease states. For example, it will increase in hyperthyroidism and will decrease in hypothyroidism.

Metabolism

Digoxin is approximately 26% metabolized except in patients with severely congested livers. The other 74% is excreted unchanged through the kidneys. Since the rate of metabolism of digoxin is fairly constant, changes in elimination of the drug are dependent on renal function.

Figure 1 is a schematic diagram of the one compartment open model used to describe the pharmacokinetics of digoxin. Each of the k's represents a specific rate constant: k_a is the absorption rate constant, k_m is the metabolic rate constant, and k_r is the renal elimination rate constant. From this model it can be seen that digoxin

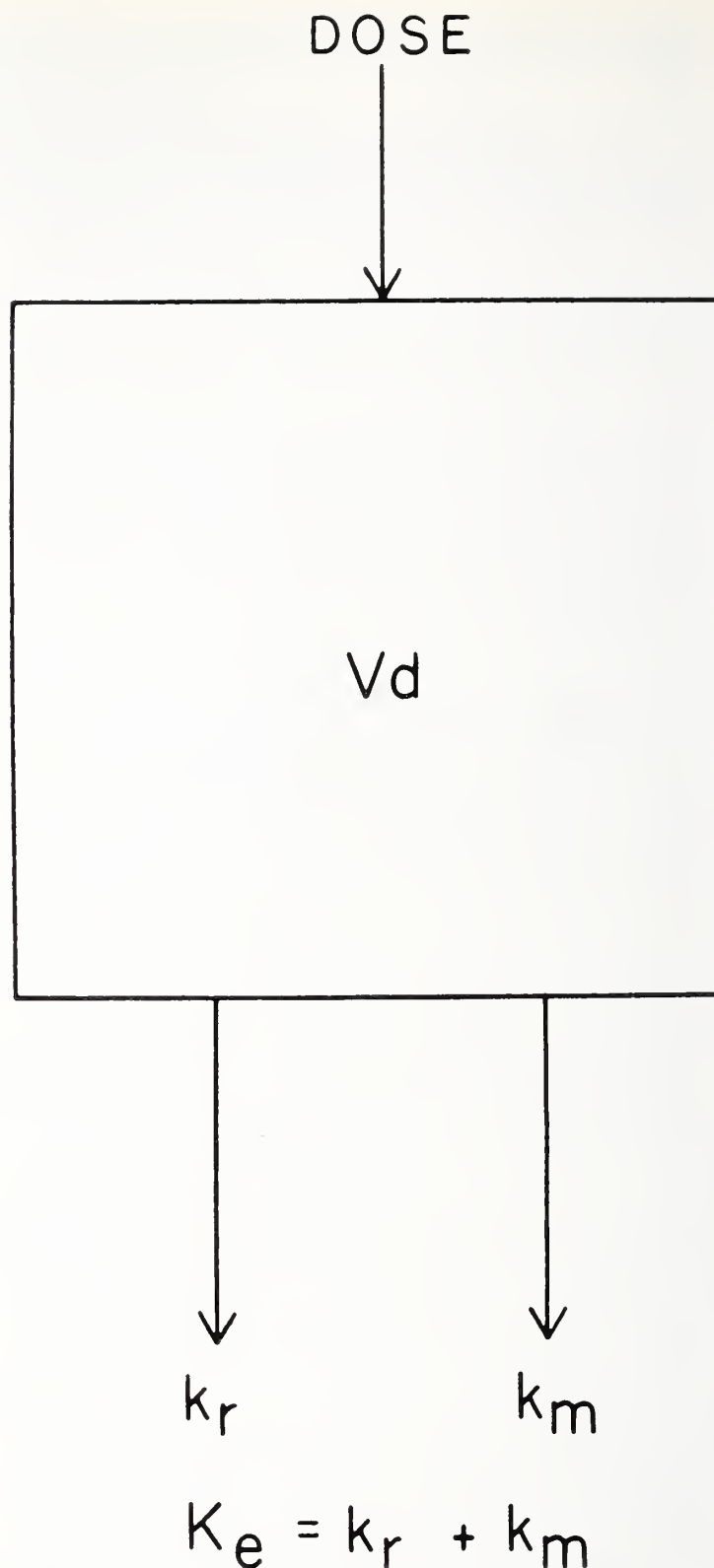


Figure 1. One compartment open model in which the rate constants for absorption, renal excretion and metabolism of digoxin are designated as k_a , k_r , and k_m . Vd is the volume of distribution; k_e is the elimination rate constant.

is absorbed into a compartment volume represented by Vd and eliminated by metabolic and renal pathways. The Vd does not correspond to any specified body fluid but rather to the "apparent" volume of distribution mentioned above.

Excretion

To estimate the half-time ($t_{1/2}$) of digoxin in a patient with decreased renal function, the pa-

tient's overall ability to eliminate the drug must be evaluated. The *overall* elimination rate constant (k_e) for digoxin in normal patients is equal to the sum of the metabolic rate constant (k_m) and the renal elimination rate constant (k_r), or $k_e = k_m + k_r$. The overall elimination rate constant for a patient with renal dysfunction (k_e^*) is equal to the metabolic rate constant, k_m , plus the normal k_r multiplied by the percent of renal function remaining in the patient or

$$k_e^* = k_m + \left\{ k_r \times \frac{c_{cr}}{100} \right\}.$$

Thus a patient with a creatinine clearance of 50 ml/min/1.73 m², the normal being 100 ml/min/1.73 m², will have 50% of the normal elimination of digoxin by renal mechanisms or $k_e^* = k_m + 0.5 k_r$. The patient's overall elimination rate constant, k_e^* , is then converted to the half-time by dividing it into 0.693 (the Ln or natural logarithm of 2).[†]

The mean half-life of digoxin in patients with normal renal function is approximately 44 hours while the half-life of digoxin in patients with no renal function has been shown to be approximately 169 hours. From these values it can be shown that the k_m for digoxin is 0.693/169 hr or 0.0041 hr⁻¹, and that the k_r is 0.693/44 hr—0.693/169 hr or 0.0116 hr⁻¹.

Maximum and Minimum Serum Concentration

Equations are available to estimate the maximum and minimum serum concentrations of digoxin at steady state.⁵

$$Cp_{ss} \max = \frac{F \times D}{Vd} \times \frac{1}{(1 - e^{-k_e \tau})}$$

$$Cp_{ss} \min = Cp_{ss} \max \times e^{-k_e \tau}$$

where:

$Cp_{ss} \max$ = maximum concentration of drug at steady state

$Cp_{ss} \min$ = minimum concentration of drug at steady state

F = fraction of drug absorbed into systemic circulation (equal to one if dose is administered intravenously)

D = dose administered

Vd = apparent volume of distribution

k_e = elimination rate constant ($k_e = \frac{0.693}{t_{1/2}}$)

τ = dosing interval

e = base of the natural logarithm, 2.71828.

Steady state serum concentrations are defined

[†]A rate constant expresses a fractional change per unit of time. In first order (exponential) kinetics, the product of the rate constant, k , and of the half-time, $t_{1/2}$, is equal to 0.693 or $k_e t_{1/2} = 0.693$, and $t_{1/2} = \frac{0.693}{k_e}$.

as the maximum and minimum concentrations possible for a given dosing regimen. Steady state is reached when the amount of drug eliminated from the body over a dosing interval is equal to the amount of drug put into the body over the same dosing interval. The time it takes to reach steady state serum concentrations if no loading dose is given is approximately five times the half-time of the drug. Therefore with digoxin the time it will take to reach steady state in a patient with normal renal function is 44 hours times five, or approximately nine days. To use the equations, a value for the dosing interval, τ , and for F , the fraction of the dose absorbed after oral dosing, are needed. The usual dosing interval for digoxin is 24 hours and the fraction of the dose absorbed is 0.6 or 60% as discussed earlier. By altering the dose or dosing interval the most appropriate dosing regimen for the patient can be calculated based on achieving a specified maximum and minimum serum concentration.

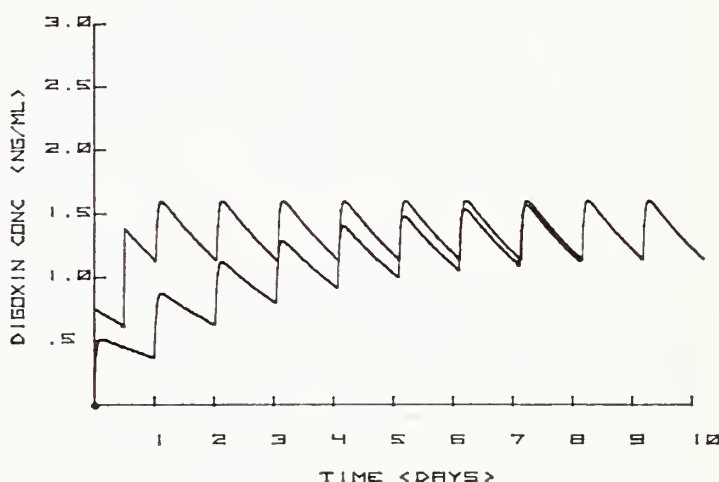


Figure 2. Theoretical serum concentrations of digoxin in a patient receiving a daily oral maintenance dose (lower curve) as compared to a patient receiving an initial loading dose followed by a daily maintenance dose (upper curve).

Figure 2 is a computer printout of projected serum digoxin levels using different dosing techniques. The serum concentrations in the lower curve represent the expected levels in a patient who is begun on a maintenance dose of digoxin of 0.25 mg, P.O., q.24 hr. A steady state is slowly reached at which time the maxima and minima become constant. If this patient was loaded with two intravenous doses of 0.25 mg and then maintained with 0.25 mg, P.O., q.d. (upper curve), in 24 hours his daily maximum and minimum concentrations would be approximately as high as those achieved with a fixed oral dose over eight days.

Figure 3 is the computer printout of today's

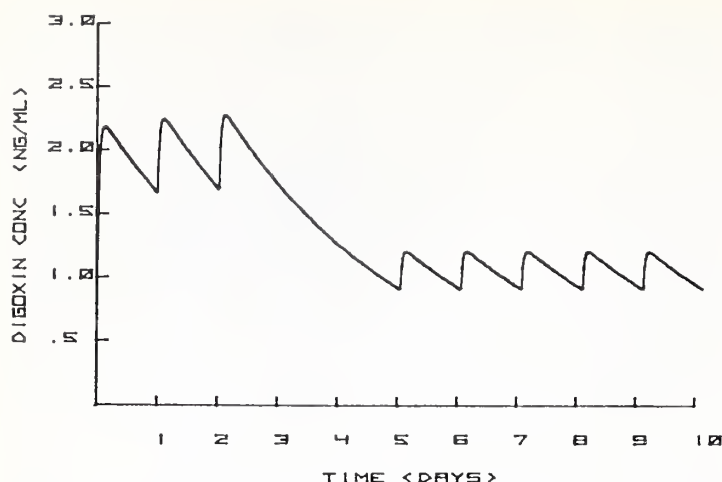


Figure 3. Computer estimation of digoxin concentrations in patient after a serum level, determined 24 hours after admission, became available.

patient's serum levels. He came into the hospital receiving 0.25 mg of digoxin daily. Our calculated maximum level was 2.2 ng/ml; the measured maximum serum level was 2.4 ng/ml. Using the estimated digoxin half-time for this patient we calculated how long the drug should be withheld for the level to drop to the steady state minimum expected on a new dosing regimen of 0.125 mg, P.O., q.d. At this point we estimated that the serum concentration would be 0.9 ng/ml; the measured level was 0.8 ng/ml.

TABLE 1
PHARMACOKINETIC
PRINCIPLES IN DIGOXIN THERAPY

Dose by Lean Body Weight

Oral Tablet Absorption is 60%

Volume of Distribution Decreases in Renal Impairment

Proper Interpretation of Serum Level Data is Dependent on Knowledge of Time Sample was Drawn and Previous Dosage Regimen

Pharmacokinetics is a Tool to be Used Only in Conjunction with Clinical Judgment to Determine Dosing Regimens

Summary of Pharmacokinetics

There are several important points to remember when dosing a patient using pharmacokinetic principles (Table 1). First, dose the patient using estimated lean body weight since digoxin does not distribute to any extent into adipose tissues. Next, recalling that the oral tablet is approximately 60% absorbed is important when changing the dosing from the intravenous to oral or oral to intravenous route. The apparent volume of distribution of digoxin decreases with renal impairment. Proper interpretation of serum level data is dependent on a knowledge of the time the sample was drawn and the dosing regimen

the patient was receiving. Finally, pharmacokinetics is a tool to be used only in conjunction with clinical judgment to evaluate and determine an appropriate drug dosing regimen for the individual patient. Pharmacokinetic *estimations* should never be used without input from all clinically relevant data. In light of all the clinical data available, a decision must be made on what serum level is most appropriate and then use pharmacokinetic technique to achieve it.

Digoxin has been shown to have a high incidence of toxicity, but through the use of pharmacokinetics the incidence of toxicity can be reduced. By including pharmacokinetic techniques in patient care we can suggest an individualized dosing regimen which may produce a serum level for maximum effect yet remain within statistically safe limits. Pharmacokinetics give the practitioner insight into an aspect of therapy which he has not had in the past and should aid him in developing effective dosing regimens with digoxin.

CHARLES E. KOSSMANN, M.D.:

The physician who has struggled with the problems of digitalization over a professional lifetime sits in wide-mouthed awe of the elegant techniques now available for putting numbers on many of the variables involved, thanks to the pharmacokineticist. Exponential rate constants of absorption and excretion, "apparent" volumes of distribution, elimination half-times, maxima and minima of serum or plasma concentrations—all give him a feeling of previously unattainable quantitative reassurance and capability in providing cardiotoxic support to the patient with a failing heart or hazardous arrhythmia. He might be a little wistful at the realization that these numerical approaches to digitalis dosing may presage his ultimate elimination from the therapy of heart failure and his replacement, at least in part, by a machine—the computer. Like all pragmatic clinicians he accepts this potential fate so long as it provides him with much needed help in carrying the burgeoning load of management of patients with failing hearts.

In a more guarded moment, however, he recalls the hazards, failures, and disillusionments in his past experience with many aspects of therapeutics. He wonders whether the single compartment model is too simple to encompass the great variability of the human biologic system. He finds somewhat worrisome the assumptions on which it is based—that elimination of the drug remains

constant with time; that distribution of it is uniform and occurs rapidly; that digitalis effect is closely and invariably related to serum concentration; that absorption and elimination constants follow faithfully the laws of first order kinetics; that the elimination process is not saturated by toxic levels of the drug. Most important, perhaps, he notes the great variability of therapeutic (0.5 to 2.0 ng/ml) and of toxic (1.7 to 5.7 ng/ml) serum levels, facts which suggest that the clinically elusive myocardial concentration may be a significant factor in effective digitalization of the patient. Drs. Straughn and McGraw have warned us not to neglect the clinical data which include age and lean weight of the patient, nature of the myocardial disease, severity and stage of the congested state, level of the serum electrolytes particularly potassium, blood gases, and renal function. So perhaps the bedside clinician cannot be dispensed with just yet in the prescribing of digitalis. In fact Dr. Straughn has told us that he must have a serum level to begin the whole process of pharmacokinetic appraisal; the physician must be involved at least to that point.

None of the above is meant to diminish the dramatic and significant contribution of pharmacokinetics to the better understanding of drug therapy in general.

Objectives of Digitalis Therapy

In trying to explain to the student or physician what he should be trying to do with digitalis, the question posed by the young bride who was baking a cake for her new husband comes to mind. The recipe she was using stated, at the end, to "cook until done." Her concern, naturally, was how one determines that a cake is indeed fully baked. Digitalization has the same superficially nebulous objective—to "cook until done" or in clinical terms, to give the drug until the desired digitalis effect is obtained. Fortunately, there are specific therapeutic endpoints in the case of digitalis, and relatively simple though not adequately utilized criteria for deciding that they have been achieved. They are (1) to relieve or prevent congestion of the circulation secondary to heart failure; (2) to control the ventricular rate in a rapid atrial rhythm such as atrial fibrillation or atrial flutter by inducing junctional exit block; (3) to convert an abnormal rhythm (atrial tachycardia) back to normal.

In reaching for the endpoint in the patient with a congested circulation from heart failure the

therapist must provide enough of the drug often enough to maintain a level in the body in the therapeutic range or, stated differently, above the ineffective range but below the toxic range. As you heard, we now can define the therapeutic range in terms of a serum level, at least of digoxin. This is approximately 0.5 to 2.0 ng/ml but there are, as noted, wide variations in these numbers depending on circumstances, a fact qualitatively well known to the clinician long before a method of determining serum levels of digoxin was available.

Bedside Principles for Avoiding Digitalis Toxicity

Time does not permit a comprehensive coverage of the use of digitalis but some brief remarks can be made which may help in avoiding digitalis toxicity. These remarks will be limited to one preparation, namely digoxin.

A long time ago G. Canby Robinson⁶ stated that "the first requisite for the successful employment of digitalis is the recognition of its toxic effect." Although the signs and symptoms of toxicity, so well described by Withering,⁷ must be known and recognized by the prescribing physician, probably it is more important for him to know how to recognize the therapeutic effects which are being sought. If the physician makes frequent observations on his patient and watches for the easily detectable signs of success in treating congestive failure (decreased dyspnea and orthopnea, diuresis with loss of weight, reduction in heart size, slowed heart rate, falling pulmonary wedge pressure) toxicity should be produced rarely. If a very sick patient requires fairly rapid digitalization, he should be examined before each additional dose, and if readily available, an electrocardiogram recorded not only to note the effects of the drug on the S-T segment and T wave but to detect any early toxic rhythm such as an accelerated junctional rhythm which cannot be recognized by physical examination alone. Although digoxin prescribed either orally or intravenously reaches its peak effect in six hours, an initial effect is usually apparent within an hour and peak effect may occur as early as two hours. If after a given dose, perhaps 0.5 mg, P.O., none of the desired effects is apparent, it is reasonable to assume that the volume of distribution is large or some other factor is operating to make a larger than usual dose desirable. Under these circumstances, a second dose can be given at the end of

two hours. This need is especially easy to judge in most cases with atrial fibrillation where the ventricular rate is usually an excellent indicator of digitalis effect.

The dose of digitalis required for therapeutic effect is *less* than average in certain situations. In the elderly (roughly over 60 years of age, vagotonia), in the very young (less than 2 weeks old, vagotonia), in patients with jaundice (vag stimulation), in myxedema (decreased Vd), in renal insufficiency (reduced creatinine clearance and Vd), in fresh myocardial infarction (increased excitability and automaticity), and in cor pulmonale (hypoxia), the dose required is usually less than average in part for the reasons given in parentheses with each example.

Doses *greater* than average may be required in atrial fibrillation or flutter especially if they occur in the course of mitral insufficiency. The dose required in hyperthyroidism is larger than average, sometimes strikingly so, even though only a quarter of the given digoxin is metabolized.

When rapid digitalization is required it is always wise to divide the estimated digitalizing dose, giving half initially and one quarter at each of the next dosing intervals. A rhythm strip of the electrocardiogram, as noted, is of value in detecting a toxic rhythm. If the serum electrolytes are abnormal (low potassium, high calcium) or the blood gases and pH abnormal (hypoxia, hypercapnia, acidosis) additional efforts to correct these by other than cardiotonic therapy are essential.

One of the principal reasons for the present day high incidence of digitalis toxicity is the aggressive and often excessive use of the powerful diuretics available to the clinician today. Clearly the patient in pulmonary edema needs every help he can be given but once this distressing aspect of circulatory congestion has been overcome, a sharp reduction in the need for diuretics usually occurs as the inotropic effect of digitalis increases. It is probable that most patients after recovery from the first bout of heart failure do not need a daily diuretic and many of them will need no diuretic at all.

A careful check of a previous history of digitalis therapy must be obtained to gauge dosage properly. A general rule, which is very helpful in the management particularly of the patient with chronic congestive heart failure who is admitted to the hospital for a worsening of the congested state, is to withhold digitalis for at least 24 hours

while gathering more data, perhaps including a serum digoxin level. Meanwhile the patient can be kept comfortable with sedation, oxygen, bed rest, possibly diuretics, other inotropic agents such as aminophylline, and the recently popularized reduction of afterload by vasodilators.⁸

It is definitely hazardous to give a patient intravenous digoxin if some is known to have been taken orally in the previous five days.

Treatment

The treatment, as indicated, is or should be entirely preventive. Adherence to the principals enumerated above along with frequent observation of the patient (several times daily in early digitalization) should make digitalis toxicity an infrequent rather than the frequent clinical problem it is. This is especially true if the pharmacokinetic considerations presented are observed, and if serum digoxin levels are available.

There is no specific treatment (if passive transfer of digitalis antibodies is eliminated from consideration at present).⁹ Therapy specific for the toxic cardiac effects will depend on the arrhythmia or block produced in the heart.¹⁰ These specific problems will be considered at some future "Grand Rounds." Suffice it to say now that pharmacologic agents are required for control of ventricular arrhythmias; cardioversion is hazardous and not to be used electively. High grade atrioventricular block may be managed with temporary pacing if increasing cardiac output by increasing rate is deemed desirable.

Early recognition of toxicity with discontinuance of the drug forthwith is important. But most important of all is not to produce toxicity in the first place.

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A. JAMES GERLOCK, M.D.

A lateral view radiograph was taken of the skull of a 30-year-old woman who has sustained head trauma in an automobile accident (Fig. 1). The vital signs are stable, but the patient is unconscious. What is your diagnosis?

1. Skull fracture
2. Fracture through the frontal sinus
3. Odontoid fracture of the cervical spine
4. Occipito-atlantal dislocation

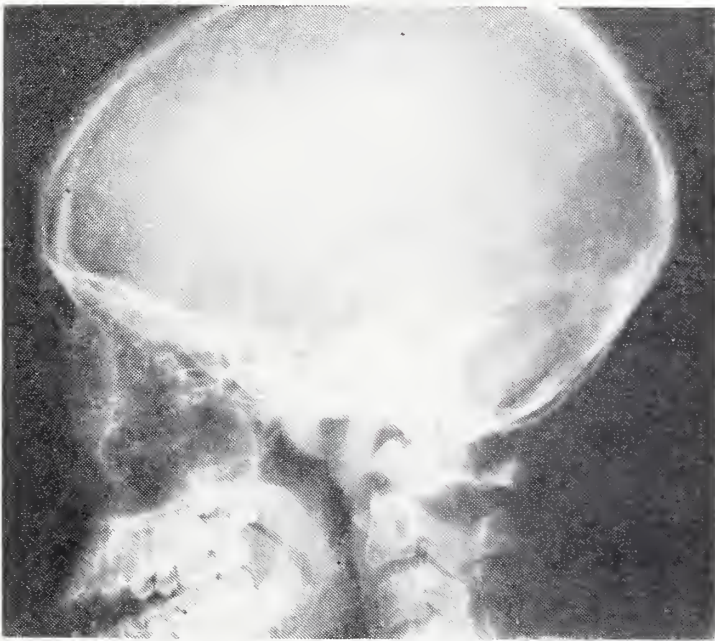


Figure 1. Lateral view of skull of patient who sustained head trauma in an automobile accident.

Discussion

Almost all radiographic views of the skull include a good lateral view of the odontoid and occipito-atlanto-axial joints. Appreciation of this fact can be extremely helpful in evaluating an acutely injured patient. To emphasize this point, the radiograph of the lateral skull is shown to demonstrate the importance of looking at the odontoid on the lateral radiographic view of the skull.

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.

Fractures of the odontoid can occur with both forced hyperflexion or hyperextension of the head and the neck. In hyperflexion injuries, the odontoid is displaced anteriorly and there is forward subluxation of the atlas on the axis. Hyperextension injuries can cause the odontoid to be displaced posteriorly, and there is posterior subluxation of the atlas on the axis as shown in Figure 1. Fractures of the odontoid can also occur without any displacement of the atlas on the axis. In all of these injuries, the fracture line involving the odontoid runs transversely across its base. The base of the odontoid is that portion which joins the spongy bone of the body of the axis. Hence, the spongy bone of the axis is weak, and the fracture line involving the base of the odontoid secretly extends downward to involve the body of the axis.

Fractures of the odontoid without displacement or subluxation of the atlas on the axis can be most difficult to diagnose. Laminography or polytomography of the odontoid in the anterior-posterior or lateral projections can be most helpful in detecting these fractures. This technique can be used whenever the patient has a history suggesting a possible fracture of the odontoid and the diagnosis is uncertain on the routine views of the cervical spine.

The test case radiography shows a posteriorly displaced odontoid with a fracture at its base. The atlas is posteriorly subluxated on the axis. This has resulted in posterior displacement of the anterior arch of the atlas and a stepoff configuration of the spino-laminar line. This injury is unstable and may, if not immobilized, result in severe neurological damage. 

ANSWER: Odontoid fracture of the cervical spine.

Screening Recognition of Primary Aldosteronism

JEFFREY B. ESKIND, B.A., MARSHALL FRAZER, Ph.D., DORENDA LATTA, M.T.,
SHEILAH WINN, R.N. and JOHN W. HOLLIFIELD, M.D.

The autonomous overproduction of aldosterone by the adrenal gland (primary aldosteronism) with its accompanying hypokalemia and suppressed plasma renin activity is an uncommon disorder accounting for less than 1% of all patients with hypertension.¹ However, this syndrome is often mentioned in the differential diagnosis of a patient with hypertension because of the relatively common findings of low serum potassium due to diuretic use and low plasma renin activity which is seen in 20% of essential hypertensives. The disorder presents a particularly difficult diagnostic problem because confirmation of the diagnosis usually requires lengthy hospitalization in a specialized metabolic unit. Thus the cost of confirming primary aldosteronism in patients suspected of having it is quite high, and no reasonable screening technique exists for detecting the disorder in the hypertensive population at large.

A number of factors control aldosterone production, and it has been well shown that both plasma aldosterone levels and urinary aldosterone excretion vary inversely with the sodium intake.² Thus, the greater the sodium intake the lower the aldosterone level. This principle can be used as an aid in the diagnosis of primary aldosteronism because normotensive subjects and those with essential hypertension exhibit a decrease in aldosterone excretion during high sodium intake. On the other hand, patients with primary aldosteronism (since their adrenal gland is autonomous and not controlled by sodium intake) will not suppress their aldosterone production

with increased sodium intake. Kem and his co-workers have simplified this approach to the recognition of primary aldosteronism by infusing normal saline and observing its effect on plasma levels of aldosterone.³ We report our experience using a modification of their protocol in distinguishing a group of patients with primary aldosteronism from those with other forms of hypertension and from normotensive subjects.

Method

Patients chosen for this study were those followed by the Specialized Center of Research in Hypertension at Vanderbilt University Hospital. Patients were studied either during hospitalization or as outpatients according to the protocol listed in Table 1. Plasma aldosterone is measured by a sensitive and specific radioimmunoassay. For the purpose of this study, plasma samples for aldosterone determinations were obtained at times

TABLE 1
PROTOCOL FOR HYPERTENSION CENTER STUDY OF
SCREENING RECOGNITION OF PRIMARY
ALDOSTERONISM

1. Exclude from this study any hypertensive patients with a history or physical findings compatible with congestive heart failure, angina pectoris, or recent myocardial infarction.
2. Exclude from this study any hypertensive patient with a diastolic blood pressure greater than 125 mm Hg until after treatment.
3. NPO after midnight except for water.
4. Supine after 8 am until 9 am.
5. Obtain plasma aldosterone determination at 9 am (control value).
6. Infuse normal saline at 17 cc/min for 30 minutes. (Total 510 cc during the first 30 minutes.) Then reduce infusion rate to 8.3 cc/min for 120 minutes. (Total 1,000 cc during the following two hours.)
7. At the conclusion of 2.5 hour saline infusion, obtain plasma aldosterone sample (post-saline).

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0, 30, 60, 90, 120 and 150 minutes; however, only the 0 (control) and 150 minutes (post-saline) samples are used for analysis presently.

Results

The data generated during evaluation of 45 subjects, 13 of whom were found to have primary aldosteronism by formal metabolic balance studies, are included herein. Four other patients were referred to the Hypertension Center with a tentative diagnosis of primary aldosteronism. This diagnosis was excluded on the basis of formal metabolic balance studies, which revealed urinary aldosterone excretion to be less than 12 $\mu\text{g}/24$ hr with a dietary sodium intake of 150 mEq/day and urinary sodium excretion greater than 110 mEq/24 hr. Two of these patients were found to have renovascular hypertension and two essential hypertension. The results for our group are presented schematically in Figure 1. The

Plasma aldosterone concentrations and samples from 16 normotensive subjects were in the range of 15 to 20 ng/dl at control time. Of these, 13 fell to undetectable levels (less than 3.3 ng/dl) at the end of the saline infusion. The majority of these had reached this minimal level within the first 90 minutes of the saline suppression test. This signifies that the renin-angiotensin aldosterone system is significantly inhibited by the sodium loading. Several secondary forms of hypertension other than primary aldosteronism are also shown in Figure 1, demonstrating a similar suppression of plasma aldosterone levels even in renovascular hypertension, primary renal disease, and the various subgroups of essential hypertension. The mean plasma aldosterone level following saline infusion in patients with primary aldosteronism was 20.1 ng/dl. No patient exhibited a post-saline value of less than 15 ng/dl following infusion of saline. Primary aldosteronism was confirmed in seven of these 13 patients by surgical removal of an adenoma with resultant improvement in blood pressure elevation. Repeat saline suppression tests in three patients following removal of their adenoma revealed normal suppressibility of plasma aldosterone determinations.

Discussion

The data presented in this study indicate that the saline suppression test has a high degree of accuracy in recognizing primary aldosteronism. The results correlate nicely with other more complicated and expensive methods of evaluating patients for primary aldosteronism. To date, the absence of false positives (patients without primary aldosteronism who failed to suppress their plasma aldosterone values to less than 8 ng/dl) or false negatives (patients with proven primary aldosteronism whose plasma aldosterone level suppresses to less than 15 ng/dl) indicates that this technique may be extremely useful in the future in the recognition of primary aldosteronism and the separation of it from all other forms of hypertension.

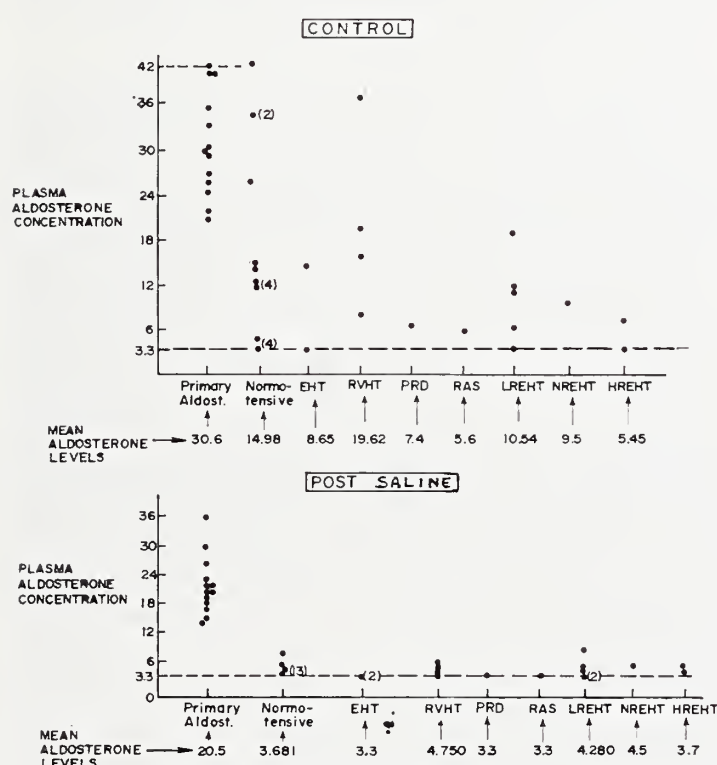


Figure 1. Results of Hypertension Center study of screening recognition for primary aldosteronism.

upper panel shows the control plasma aldosterone concentration demonstrating some degree of overlap between patients with primary aldosteronism and other hypertensive patients or normotensive controls. In the lower panel, the plasma aldosterone levels post-saline are shown and clearly separate those patients with proven primary aldosteronism from all others (hypertensive or normotensive).

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W. BARTON CAMPBELL, M.D., Co-Director

A 71-year-old retired welder was admitted to the hospital complaining of shortness of breath. He had a history of a long-standing cough productive of scanty amounts of brownish sputum daily. He continued to smoke cigarettes. Three days prior to admission he noted progressive increase in shortness of breath which became much more severe the morning of admission. He had severe orthopnea the night preceding admission. He was confused and unable to give a reliable history. On examination he was notably tachypneic. He had distant heart sounds with no rubs, murmurs or gallops. Expiratory wheezes were audible bilaterally. An electrocardiogram was obtained (Fig. 1).

Discussion

This electrocardiogram shows sinus tachycardia at a rate of 115 per minute. The PR interval is normal. Note that the tracing is half ($\frac{1}{2}$) stan-

is marked loss of R wave in V_2 through V_6 .

This tracing is interpreted as showing right ventricular enlargement resulting in the rightward and anterior QRS forces and T inversion in V_1 and V_2 . Although an anterior infarction of indeterminate age is suggested by the QS wave in V_3 and V_4 in the setting of severe chronic obstructive lung disease this reading cannot be made with specificity. The notably inferior P forces resulting in tall P waves in III and AVF are also compatible with chronic lung disease and are suggestive of right atrial enlargement. The maximum voltage of the P wave in lead II is 2 mm, however, this is of borderline amplitude to read right atrial enlargement. The patient upon whom this electrocardiogram was obtained was notably

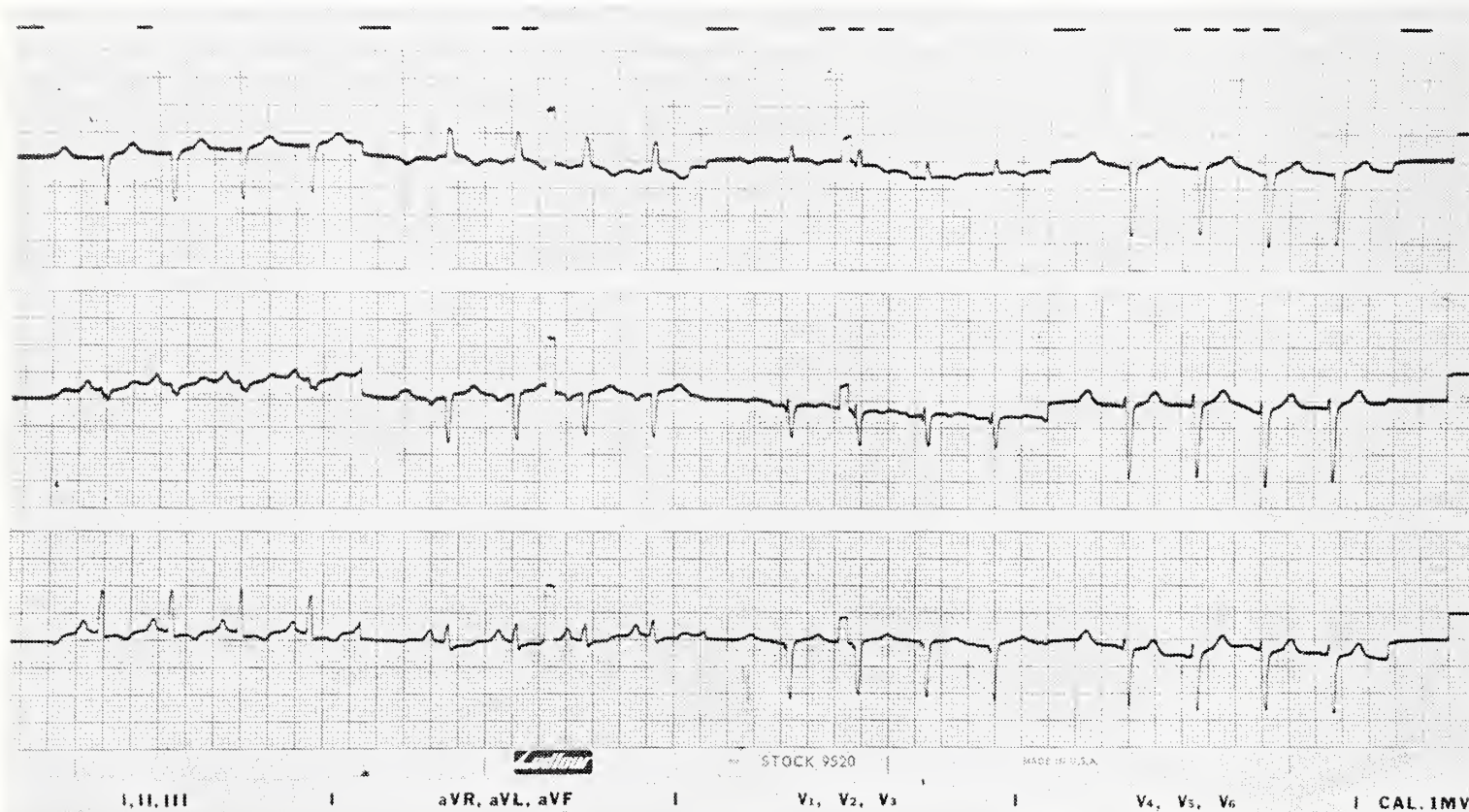


Figure 1

dardized in the precordial leads. There is remarkable right axis deviation resulting in QS waves in standard lead I and tall R waves in AVR. In addition there are prominent anterior forces in V_1 resulting in an R wave. The T waves are inverted in lead V_1 and biphasic in V_2 . There

hypoxemic with a PO_2 of 44 mm Hg and a PCO_2 of 54 mm Hg. The sinus tachycardia is thought to be secondary to this chronic lung disease.

Final Diagnosis: (1) Right ventricular enlargement resulting in right axis deviation and prominent R wave in V_1 with T inversion in V_1 - V_2 . (2) Sinus tachycardia. (3) Tracing is compatible with chronic obstructive lung disease.

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Laboratory Investigation of Hemolytic Anemias

Part II

C. SOTELO-AVILA, M.D., and W. M. GOOCH, III, M.D.

Identification of the Specific Mechanisms Of Hemolysis

1. *Membrane defects.* Best represented by hereditary spherocytosis and hereditary elliptocytosis.

a. *Osmotic fragility of red blood cells, 24-hour incubation.* The osmotic fragility after incubation at 37 C for 24 hours is the single most useful laboratory determination in this group. Increased fragility characterizes red blood cells of hereditary spherocytosis but it is not specific, since increased fragility is also found in other hemolytic anemias in which spherocytes are present. The test may be combined with the spontaneous hemolysis developing in blood incubated at 37 C for 48 hours (autohemolysis test, see 2a(1) below).

2. *Enzymatic defects.* Diagnostic tests of enzymatic red cell defects include screening tests and specific enzyme assays.

a. *Screening tests* vary in specificity and sensitivity. Positive or equivocal results with screening tests require quantitative specific assays for the enzymatic anomaly for confirmation.

(1) *Autohemolysis test.* Lack of specificity limits the usefulness of this test. The three distinct autohemolysis patterns are shown in Table 1.

In acquired hemolytic anemia, the autohemolysis test results are variable and not diagnostic.

(2) *Heinz bodies preparation, incubated.* This screening test identifies unstable hemoglobins and enzymatic deficiencies in the pentose phosphate pathway

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TABLE 1
AUTOHEMOLYSIS PATTERNS

Autohemolysis Type	Definition of Disorder
I. Autohemolysis partially corrected with adenosine triphosphate (ATP) or glucose.	Glucose-6-phosphate dehydrogenase deficiency, hexokinase deficiency and hereditary spherocytosis.
II. Autohemolysis corrected with ATP but not glucose.	Piruvate kinase (PK) deficiency.
III. Autohemolysis completely corrected with ATP or glucose.	Triosephosphate isomerase.

(hexose monophosphate shunt), i.e., G-6-PD and glutathione reductase.

(3) *Ascorbate cyanide.* This very sensitive but nonspecific test gives positive results in G-6-PD, PK, glutathione reductase and glutathione peroxidase deficiencies, and paroxysmal nocturnal hemoglobinuria. It detects G-6-PD deficiency in the heterozygous state and during hemolytic episodes. False-positive results may be obtained in newborn infants due to relative deficiency of glutathione peroxidase.

(4) *Dye reduction (brilliant cresyl blue dye) test* is specific for G-6-PD but less sensitive. False-negative results may be obtained during or immediately after a hemolytic episode due to selective destruction of G-6-PD deficient (older) cells.

(5) *Spot fluorescent tests for G-6-PD or PK.* These tests are useful for screening large numbers of individuals detecting both homozygous and heterozygous PK deficient subjects, but only G-6-PD deficient homozygotes.

b. *Specific tests for G-6-PD and PK* are available, but laboratory identification of other red cell enzyme deficiencies is beyond the scope of most hematology laboratories.

3. *Hemoglobin: Structural abnormalities (hemo-*

globinopathies).

- a. *Solubility test* is based on the insolubility of reduced hemoglobin S (HbS) giving positive results in HbS disease and HbS trait. Positive results must be confirmed by hemoglobin electrophoresis.
 - b. *Alkali denaturation test for HbF (Singer)*. Increased HbF concentrations are found in homozygous HbS and HbC, heterozygous and homozygous beta thalassemia, hereditary persistence of HbF, HbE-thalassemia, and in newborn and young infants. The concentration varies from normal to elevated in HbC disease, HbSC disease and HbC-thalassemia.
 - c. *Hemoglobin electrophoresis* detects and identifies the hemoglobinopathies and unbalanced synthesis of hemoglobin (thalassemias).
 - d. *Heat-instability test*. The laboratory diagnosis of unstable (thermolabile) hemoglobins depends on the demonstration of a heat-labile hemoglobin, i.e., Hb Louisville, Hb Zurich, etc.
4. *Hemoglobin: Abnormal rate of synthesis (thalassemias)*.
- a. *Hemoglobin A₂ quantitation and HbA₂:HbA₁ ratio*. In beta thalassemia minor, the HbA₂ concentration is characteristically increased. In beta thalassemia major, HbA₂ values expressed as a percentage of the total hemoglobin tend to be normal or reduced, but the normal 40:1 HbA₁:HbA₂ ratio is always reduced. The HbA₂ quantitation should be combined with the alkali-resistant HbF determination and the Hb electrophoresis.
5. *Obscure etiology (paroxysmal nocturnal hemoglobinuria [PNH])*.
- a. *Sucrose hemolysis*. The whole blood screening test and the confirmatory sucrose hemolysis test are highly specific and sensitive tests for PNH. Positive results must be confirmed by the acid hemolysis (Ham) test. All three tests depend upon susceptibility of red cells to lysis by complement.
 - b. *Acid hemolysis (Ham) test*. A positive test characterizes PNH.
6. *Chemical agents (drugs)*.
- a. *Heinz bodies, direct*. Direct supravital staining of red cells during an acute hemolytic episode will demonstrate denatured hemoglobin in the form of Heinz bodies.

- b. *Methemoglobin spectrophotometric identification*. Increased amounts of methemoglobin are identified in congenital methemoglobinemia and in normal individuals and those with enzymatic abnormalities (G-6-PD, glutathione and glutathione reductase deficiencies), unstable hemoglobins (Hb Zurich) and hemoglobin M after exposure to any of a variety of oxydizing drugs, and organic and inorganic nitrates and nitrites.
- c. *Sulfhemoglobin spectrophotometric identification*. Many of the drugs which produce methemoglobin will also produce sulfhemoglobin, i.e., sulfanilamide, acetanilide and sulfonal. Patients with *Clostridium welchii* septicemia may also have circulating sulfhemoglobin.

Summary

- A. Recognition of Anemia
 1. Hematocrit, hemoglobin and red cell indices
 2. Peripheral blood smear
 3. Reticulocyte count
 - B. Recognition of Hemolysis
 1. Hemoglobin binding capacity of haptoglobin
 2. Plasma hemoglobin
 3. Urinary hemosiderin
 4. Serum bilirubin
 5. Fecal and urinary urobilinogen
- Further Studies
1. Red cell survival studies
 2. Bone marrow aspiration and biopsy
- C. Identification of the General Mechanisms of Hemolysis
1. Direct Coombs positive
 - a. Cold agglutins
 - b. Donath-Landsteiner
 - c. Antibody identification
 2. Direct Coombs negative. (See D below)
- D. Identification of Specific Mechanisms of Hemolysis
1. Membrane defects
 - a. Osmotic fragility, 24-hour incubation
 2. Metabolic (enzymatic) defects
 - a. Screening tests
 - (1) Autohemolysis
 - (2) Heinz bodies preparation, incubated
 - (3) Ascorbate cyanide
 - (4) Dye reduction
 - (5) Spot fluorescence for G-6-PD or PK
 - b. Specific red cell enzyme assays for G-6-PD and PK
 3. Hemoglobin structural abnormalities
 - a. Solubility test
 - b. Alkali-resistant HbF (Singer)
 - c. Hemoglobin electrophoresis
 - d. Heat-instability test
 4. Hemoglobin abnormal rate of synthesis
 - a. Hemoglobin A₂ quantitation and HbA₁:HbA₂ ratio
 5. Obscure etiology (PNH)
 - a. Sucrose hemolysis tests
 - b. Acid hemolysis (Ham) test
 6. Chemical agents (drugs)
 - a. Heinz bodies, direct
 - b. Methemoglobin
 - c. Sulfhemoglobin

Posterior Mitral Valve Vegetation

ROBERT L. BELL, M.D., and CARTER WILLIAMS, M.D.

This 69-year-old man developed daily fever spikes of 100 F and right flank pain two months after a TUR for prostatic hypertrophy. The daily fever spikes persisted for approximately five months during which time petechiae were observed on his legs. He was then admitted to the hospital.

The patient was pale, had emphysema, and there was a loud murmur consistent with mitral insufficiency. Small petechiae were seen on the soft palate and there was a red rash between the toes. An echocardiogram and pulsed doppler study were performed.

Because of coarse echoes or reverberations in the mitral orifice during diastole, together with prolapse of the posterior leaflet of the mitral valve during systole (Fig. 1) the differential

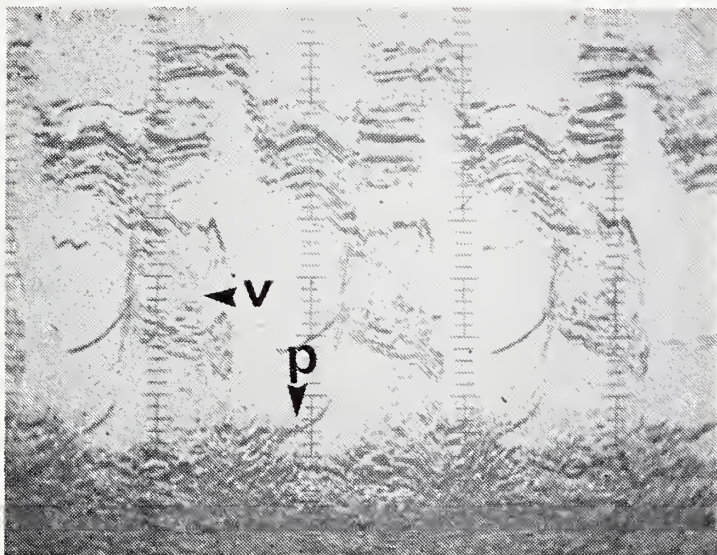


Figure 1. V = Echoes in mitral orifice (vegetation)
P = Prolapsed posterior mitral valve leaflet in systole

diagnosis on the echocardiogram was (1) vegetation on the mitral valve, (2) flail mitral valve, and (3) left atrial myxoma. However, numerous normal mitral valve echoes were seen, without irregular echoes in the mitral orifice during diastole. The posterior leaflet closed well during systole (Fig. 2). These relatively normal echoes essentially ruled out left atrial myxoma and flail mitral valve.

Furthermore, the clinical history also did not support the diagnosis of left atrial myxoma or flail mitral valve.

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

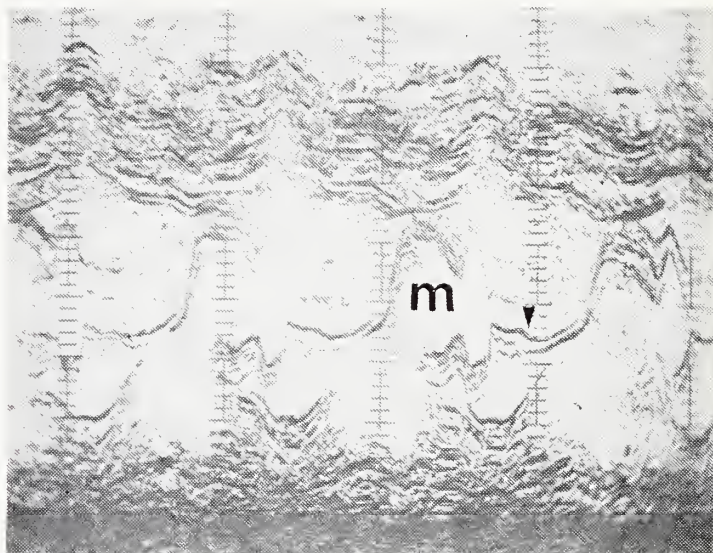


Figure 2. M = Mitral orifice with no internal echoes
➔ = Posterior mitral valve leaflet in systole

The pulsed doppler study (Fig. 3) showed turbulence in the left atrium during systole. Five blood cultures all revealed group D streptococci. The patient showed a good response of his fever and his pain after antibiotic therapy was undertaken (ampicillin). The murmur still persists. In this locus a 70% to 80% recovery rate might be expected with a small bacterial vegetation treated with the appropriate antibiotics.

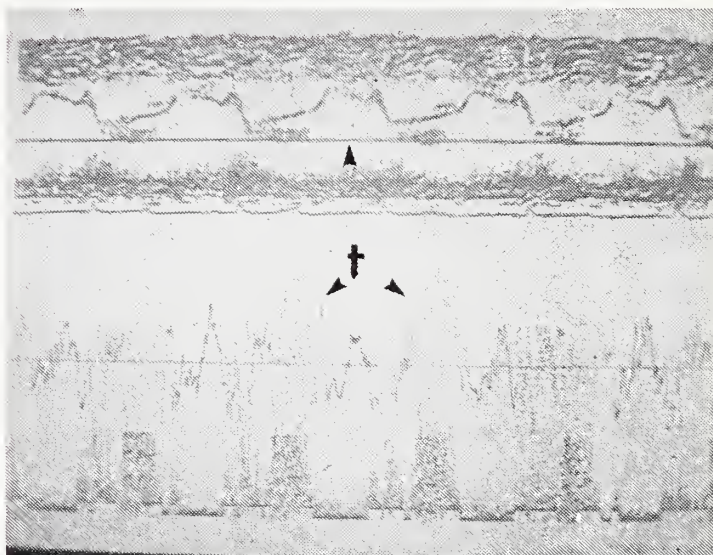


Figure 3. Upper arrow = line representing sample cursor in left atrium behind mitral valve
T = Graph of turbulent flow in left atrium (arrows indicate systole)

Centennial of Public Health in Tennessee

JEAN H. INMAN

To observe the 100th anniversary of public health in Tennessee, a national and state health conference is planned for Nov. 15-17, 1977, at the Hyatt Regency Hotel in Nashville.

The centennial conference is sponsored jointly by the Tennessee Department of Public Health and the Tennessee Public Health Association and will highlight accomplishments in public health in Tennessee and nationally. In addition, the conference will explore major issues in health care delivery and the role of public health in the development and implementation of national health policy in the future.

Participants in the conference will be employees of the Tennessee Department of Public Health, members of the Tennessee Public Health Association, representatives of various facets of the health care delivery system in states other than Tennessee, and representatives of federal programs having policy influence in the delivery of public health services, plus governmental and legislative representatives for the state of Tennessee, representatives of the private sector of the health care industry within the state of Tennessee, and consumers of health services.

General chairman for the conference is Dr. H. P. Hopkins, director of Policy Planning, Tennessee Department of Public Health. Dr. Mary B. Duffy, director, Knox County Health Department, is president of the Tennessee Public Health Association and Dr. Eugene W. Fowinkle is commissioner of the Tennessee Department of Public Health.

The keynote address will be given by a member of the Carter administration who will address the administration's plans for development of a national health policy.

Participants and topics designed to focus on current issues in the provision of public health services include the following: issues in delivery

of services at the local level—George Pickett, M.D., director, San Mateo County Department of Public Health and Welfare, San Mateo, Cal. and president, American Public Health Association; issues from the state perspective—Maurice Reizen, M.D., director, Michigan Department of Public Health; economic issues in public health service delivery—Michael Zubkoff, M.D., Department of Community Medicine, Dartmouth University; and organizational issues: administrative problems, alternative delivery systems—George A. Silver, M.D., professor of public health, Yale University School of Medicine.

Workshops designed to expand on the above topics will give all conference attendees an opportunity to participate. Workshop sessions are also planned to follow the speaker on national health policies. In the latter, participants will discuss the role of public health in medical care delivery, prevention, chronic disease control, regulation and monitoring of the environment, and influencing health policy.

A special feature of the conference is a banquet and multimedia presentation highlighting the progress and accomplishments of the first 100 years of service in Tennessee public health. People who played significant roles in the growth of Tennessee public health will be recognized at the banquet on Tuesday night, Nov. 15.

The conference sessions are organized around three broad areas of emphasis: the accomplishments of public health in Tennessee in its first 100 years of service, an examination of the current issues in provision of public health services, and an examination of major issues in development of future national health policy. "We envision our celebration as a unique opportunity to reaffirm some traditional roles of public health in our communities and to explore some alternatives for the role that public health can perform in the health care delivery system of the future," Commissioner Fowinkle said.



From the Tennessee Department of Public Health, Nashville.

Residential Treatment for Emotionally Disturbed Children & Adolescents in Tennessee

W. W. LEWIS

The Tennessee Department of Mental Health and Mental Retardation operates a network of five residential treatment centers for children and adolescents with serious emotional and behavioral problems. While each of the centers is administered by one of the regional mental health institutes (formerly psychiatric hospitals), and four of the five centers are accredited by the Joint Commission on Accreditation of Hospitals, the centers are operated as small residential schools, staffed principally by educators.

The model for these programs was developed in Nashville with the help of a federal grant and was referred to as Project Re-Ed during the demonstration phase. The demonstration school, Cumberland House, was opened in 1962 to work with children ages 6 to 12. An important part of the motivation for the demonstration was to develop a less expensive mode of treatment than psychiatric residential centers staffed by mental health professionals and one that was more effective than placing children in state hospitals designed for an adult population. There were at that time virtually no residential treatment facilities in the southeastern states especially for children or adolescents. A small number of children were sent to expensive private programs in other parts of the country, but most had to be placed inappropriately in large public institutions or managed at home under very trying conditions.

Cumberland House was designed to serve 40 children, organized into five groups of eight children, with a team of three educators working with each group of children, and mental health professionals in supporting, rather than direct service, roles. The three team members are organized functionally according to three roles: the day teacher-counselor emphasizes remediation

of academic deficits in classroom activities; the night teacher-counselor emphasizes learning of social and behavioral skills in group and home-like situations; and the liaison teacher-counselor plans with the child's parents, public school and community agencies for his return home. Together, the teacher-counselors identify specific goals toward which they, the child, and his community caretakers work, to increase the child's competence and to support that positive change in his natural behavior settings.

In contrast to conventional mental health treatment, the Re-Ed program was able to return children to their homes and public schools usually in about six months, with careful planning for follow-up. The brief period of residential treatment, and having children return home each weekend, make it less likely that children will adapt to institutional living and keeps responsibility where it belongs, in their homes and communities.

The residential treatment is not seen as sufficient in itself, but as a temporary resource to influence in specific ways the quality of a child's interactions with agents of his socialization with whom he has come into conflict. This led to an emphasis on the "ecological unit," meaning that change in the child's behavior is important, but change in his natural behavior settings that encourage continued progress is equally important. Goals for treatment are simple and direct, involving skills that can be taught and learned. Two criteria are important: The goal must be achieved in a brief period of time and its attainment should enhance the child's relationship with other members of his ecological unit. Even though improvements in a child's behavior are modest ones, they may, coupled with changes in home, school and community, be sufficient to sustain him and his ecological unit in mutually rewarding, growth-

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

facilitating relationships.

A typical day in one of the residential programs begins after breakfast with each group of children going to class and engaging in school activities, with breaks for recess and lunch. The school day is carefully programmed with instruction in basic academic skills: reading, arithmetic, and language usage. Since placement of children in groups is based as much on social maturity as educational achievements, much of the academic instruction is individualized to develop skills that will have maximum utility for each child. However, units of instruction that support heterogeneous educational abilities, such as preparing for a field trip, are also an important part of the curriculum.

The nonacademic part of the day also programs for individual competence which has social currency for students, but which has not been developed. The ability to catch a baseball or roller-skate or swim may have social utility as important as arithmetic skills in a child's reintegration into his normal and home environment. Thus a program of planned instruction, reflecting an assessment of children's needs for socially adaptive skills is extended beyond the bounds of the usual school day. That is also true of the evening program, which emphasizes competence in living harmoniously with a group of peers and the adults to whom a child is responsible. It is one of the important strengths of the staffing pattern that the afternoon and evening hours, including routine tasks, are supervised by well-trained, sensitive adults. Parents are continuously involved through the weekends at home and their interactions with staff related to those occasions.

Each child's individual progress is reviewed periodically, along with the progress made in planning with his family, school, and community resources. As soon as the child is functioning well enough, and/or his ecological unit is changing its tolerance thresholds and opportunities enough to support his behavior with a prognosis for his healthy development, plans to return him to his own home and school will be activated.

Part of the initial demonstration was a careful evaluation of the effectiveness of the new treatment program. Status of former students was assessed 18 months to two years after they left the residential school. Information from the students, parents, and teachers indicated that about 80% of them were doing well in their own homes and schools. The others continued to need special

treatment. Comparisons with more conventional treatment programs are problematic, but it appeared that the results of the new program were as beneficial and had the added advantages of being briefer, less expensive, and less demanding of time of scarce mental health professionals.

For these reasons, the department adopted the new model of residential treatment for replication in all of its regional mental health institutes. In 1967, schools for children were opened in Memphis and Chattanooga and, after that, the first school for adolescents in Chattanooga. Still later, programs were initiated in Knoxville and Bolivar, and adolescent components were added to those that did not have them. The programs became part of the five regional mental health institutes to serve as the institutes' inpatient facilities for all persons up to age 18. A total of about 250 children and adolescents are enrolled in all five programs, but because of the relatively brief stay, many more can be served in a year. During 1976 almost 800 children and adolescents were admitted to the programs. Since these programs have been in operation, it is an extreme rarity for a child or adolescent to be placed in out-of-state residential treatment or on an adult ward in a mental health institute.

The schools vary in size; the smallest accommodates 20, and the largest 80. They also vary in composition of support staff, and in arrangements of physical facilities, but all have maintained the essential elements of the original model.

Some modifications were necessary because they are located administratively in state mental health institutes. There is more immediate access to medical support services. A psychiatrist reviews and approves treatment plans, and nursing services are available around-the-clock. While these and administrative support services have increased the costs of the programs, they have also improved their overall quality. Even more important have been the legal consequences of having become the child and youth service of a state mental health facility.

The original demonstration school, Cumberland House, was designed to treat children who were mildly to moderately disturbed with average or higher intelligence. Not all referrals were accepted, since the staff could exercise judgment in admitting only children they felt could profit from the program. As part of a state system the schools must accept responsibility for children

and adolescents who might have been considered poor treatment risks during the demonstration phase. For example, any child whose condition is considered an emergency (suicide attempts, dangerous to others, etc.) by a licensed physician must be admitted, as must a juvenile committed to Corrections who is judged to be mentally ill. In addition, a juvenile court judge may order that a child be evaluated in a residential program for a period of up to 30 days.

The consequences of these added obligations

have shifted the student population in the direction of more serious emotional disturbance, more severe social maladjustment, more children from multiproblem families, and generally, a more challenging group of children and adolescents. These changes have brought about a more severe test than was intended in the original model, but it seems, with some modifications, to have met the test and has become incorporated into the array of services as a backup for other child-serving agencies in the state.

Case Report . . .

Continued from page 643

Recurrence of diarrhea is avoided by reducing the dose gradually over several days, and its administration can be resumed with higher doses if diarrhea reappears. Long-term usage may result in steatorrhea, with deficiency of fat-soluble vitamins and folic acid.¹⁵ Recently, intestinal obstruction has been reported with short-term use of this drug.^{16,17} We should consider, and at the same time be cautious about, the use of this drug in the management of intractable diarrhea which does not respond to conventional therapy.

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The Oath of Asaph and Jochanan

This Oath Is Found At The End Of The Medical Work By Asaph The Physician Who Lived In Israel In The Sixth Century A. D. The Oath Was Administered By The Jewish Teachers Of Medicine When Awarding Diplomas To Their Students.

And this is the oath administered by Asaph, the son of Berachyahu, and by Jochanan, the son of Zabda, to their disciples; and they adjured them in these words: "Take heed that ye kill not any man with the sap of a root; and ye shall not dispense a potion to a woman with child by adultery to cause her to miscarry; and ye shall not lust after beautiful women to commit adultery with them; and ye shall not disclose secrets confided unto you; and ye shall take no bribes to cause injury and to kill; and ye shall not harden your hearts against the poor and the needy, but heal them; and ye shall not call good evil or evil good; and ye shall not walk in the way of sorcerers to cast spells, to enchant and to bewitch with intent to separate a man from the wife of his bosom or a woman from the husband of her youth. And ye shall not covet wealth or bribes to abet depraved sexual commerce. And ye shall not make use of any manner of idol-worship to heal thereby, nor trust in the healing powers of any form of their worship. But rather must ye abhor and detest and hate all their worshippers and those that trust in them and cause other to trust in them, for all of them are but vanity and of no avail, for they are naught; and they are demons. Their own carcasses they cannot save; how, then, shall they save the living? And now, put your trust in the Lord your God, the God of truth, the living God, for He doth kill and make alive, smite and heal. He doth teach man understanding and also to do good. He smiteth in righteousness and justice and healeth in mercy and lovingkindness. No crafty device can be concealed from Him, for naught is hidden from His sight. He causeth healing plants to grow and doth implant in the hearts of sages skill to heal by His manifold mercies and to declare marvels to the multitude, that all that live may know that He made them, and that beside Him there is none to save. For the peoples trust in their idols to succour them from their afflictions, but they will not save them in their distress, for their hope and their trust are in the dead. Therefore it is fitting that ye keep apart from them and hold aloof from all the abominations of their idols and cleave unto the name of the Lord God of all flesh. And every living creature is in His hand to kill and make alive; and there is none to deliver from His hand. Be ye mindful of Him at all times and seek Him in truth and uprightness and rectitude that ye may prosper in

all that ye do; then He will cause you to prosper and ye shall be praised by all men. And the peoples will leave their gods and their idols and will yearn to serve the Lord even as ye do, for they will perceive that they have put their trust in a thing of naught and that their labour is in vain; (otherwise) when they cry unto the Lord, He will not save them. As for you, be strong and let not your hands slacken, for there is a reward for your labours. God is with you when ye are with Him. If ye will keep His covenant and walk in His statutes to cleave unto them, ye shall be as saints in the sight of all men, and they will say: "Happy is the people that is in such a case; happy is that people whose God is the Lord." And their disciples answered them and said: "All that ye have instructed us and commanded us, that will we do, for it is a commandment of the Torah, and it behooves us to perform it with all our heart and all our soul and all our might: to do and to obey and to turn neither to the right hand nor to the left." And they blessed them in the name of the Highest God, the Lord of Heaven and earth. And they admonished them yet again and said unto them: "Behold, the Lord God and His saints and His Torah be witness unto you that ye shall fear Him, turning not aside from His commandments, but walking uprightly in His statutes. Incline not to covetousness and aid not the evildoer to shed innocent blood. Neither shall ye mix poisons for a man or a woman to slay his friend therewith; nor shall ye reveal which roots be poisonous or give them into the hand of any man, or be persuaded to evil. Ye shall not cause the shedding of blood by any manner of medical treatment. Take heed that ye do not cause a malady to any man; and ye shall not cause any man injury by hastening to cut through flesh and blood with an iron instrument or by branding, but shall first observe twice and thrice and only then shall ye give your counsel. Let not a spirit of haughtiness cause you to lift up your eyes and your hearts in pride. Wreak not the vengeance of hatred on a sick man; and alter not your prescriptions for them that do hate the Lord our God, but keep his ordinances and commandments and walk in all His ways that ye may find favour in His sight. Be ye pure and faithful and upright."

Thus did Asaph and Jochanan instruct and adjure their disciples.

Public Policy

And the Paradoxes of Plenty

ALEXANDER HEARD, Ph.D.

Here is the paramount irony. The United States is the most productive and freest society, possessed of the greatest opportunity for individuals, among all comparable political entities in the world's history. Yet it is beset by problems so fundamental and intractable as to erode our faith in our own destiny.

We are not truly sure that we can provide health care and educational services of the kinds people want, even less sure we know and can provide the kinds they need, and we are especially unsure that the United States can afford either.

Mr. President, ladies and gentlemen and guests of the Clinical Congress . . . I value much the honor of the invitation to deliver this year's Martin Memorial Lecture, and the privilege it affords to speak directly with an eminent group of highly trained, highly specialized, highly productive, highly respected, and—in the ways most people judge such things—highly successful citizens of the United States and other nations. I count it a special privilege to be here in a year when my old personal friend from days in Chapel Hill and now my illustrious academic colleague, Bill Scott, is your President. I am grateful to all of you.

The persons who have spoken on this occasion in previous years, and the range of topics they have elected to speak about, as well as the nature

This is the 1976 Martin Memorial Lecture delivered by Professor Heard on October 14, 1976, in Chicago, to the 62nd annual Clinical Congress of the American College of Surgeons.

Mr. Heard is chancellor and professor of political science at Vanderbilt University. Previous to coming to Vanderbilt he was professor of political science and dean of the graduate school of the University of North Carolina.

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of this distinguished audience, confirm my instinct that this is a suitable time and place to address a very difficult central puzzlement of our contemporary world.

I have, for today, labeled this perplexing puzzlement "the paradoxes of plenty." I suppose I might have called it "the anomalies of success," or the "enigmas of abundance." I am concerned with what strikes me as an insufficiently anticipated and inadequately understood characteristic of the 20th century: our successes often breed new problems that seem as great as those they ameliorate or solve. It could seem as though we are finding that there *is* an end to "progress."

On May 24, 1844, Samuel Finley Breese Morse tapped out his famous message on the first telegraph line. It ran from the Supreme Court room in the capitol in Washington to the city of Baltimore. The message asked, "What hath God wrought?" Whether it was God's design or Morse's ingenuity, or the former working through the latter, we need not say here. But the telegraph and the cascade of other inventions, discoveries, and scientific applications before and since, especially during the last two centuries—James Watt's first practical steam engine, we have been reminded more than once in this Bicentennial year, appeared just about two hundred years ago—have more than any other single influence shaped the contemporary world on all continents, among all peoples. The fundamental paradox of our time is the problems begot by the successes of science and technology.

The United States and all the world around it are heir to accelerating consequences of applied science and the technological culture it has bred. Puzzling illustrations abound everywhere, but at this Clinical Congress I remind us of the ironic one provided by improvements in health care.

There was a time, in the 14th century, when

in less than a single generation at least a third of the population of all Europe was wiped out through the simple inefficiency of medical care. The Black Death was a horrible death, with frightful blotches on the body, hardened glands, swellings that responded to neither salve nor lancing, carbuncles, delirium, insanity. In the words of Sir Winston Churchill, "It seemed to be the death-rattle of the race."

I read with deep interest Dr. Charles Roland's comments "On the Advantages of Being Healthy in 1776" that appeared in the special July 4 issue this year of *The Mayo Alumnus*. It made me aware that the men of fame we associate with the great events of 1776, with the Revolutionary War, with the adoption of the Constitution—Jefferson, Madison, Hamilton, Washington, Franklin, Adams, Jay, and the others—had more in common than just their genius. They were all alive. They were healthy enough to be alive, an important achievement in 18th-century America.

Dr. Roland reports that the average life span for a member of the laboring class in 1776 was probably less than 25 years. Not only was physical health precarious from "natural" causes, but overwork and other stresses produced another condition. "A disease that ravaged the entire country at that time," he reports, "was alcoholism." He notes that, generally, ". . . the history of medical care in 1776 . . . is the story . . . of a population willing to try almost any means of cure, in the absence of any regular reliable methods. It is the story of a population following natural law, verbalized and made famous a century later: 'the survival of the fittest.'"

I remember a scene under a street light one night when I lived in Quito, Ecuador, 35 years ago. An Indian mother had just given birth. The United States trained nurse who was my companion remarked that if the child were not dead already it probably soon would be. We understood, without anybody really knowing, that 90% of Ecuadoran children born died within the year.

Biological science, medical practice, and public health policies have led to enormous progress in preventing, controlling, and curing disease. Death rates have gone down and life expectancy has shot up. Yet, as we now all realize, the consequences are not alone relief from suffering and longer, healthier lives for millions. The progress has brought, in addition, aggravated population expansion and abundant problems derived from overpopulation and extended life

spans—poverty, overcrowding, malnutrition, famine, desecration of landscape, social dislocation, personal degradation.

I dwell on this paradox because, after all, who is likely to oppose improvements in health care? To identify the condition is not to regret medical advance. It is, however, to say that we need to recognize the full consequences of our successes, those that are negative as well as those that are desired. We must acknowledge that invention can be the mother of necessity.

Your profession is freighted with dilemmas that issue from the plenty of your achievements. To face the choice sometimes of whether to prolong a life or let it end is only one of them.

The paradoxical consequences of accelerating applied science are found through all reaches of our society. I was intrigued, and startled, to read the other day a comment made by Mr. Justice Oliver Wendell Holmes in February 1913: "... I fear that we are running through the world's resources at a pace that we cannot keep. . . ."

The extraordinary productivity of our civilization has the curious consequence of threatening the survival of our civilization. Perhaps we have an absurd instance of corporate suicide by overconsumption that leads to starvation. And, too, the production of material plenty, in which we are unprecedentedly successful, contaminates as well as exhausts the environment.

Accelerating applied science imposes seemingly unbearable burdens on traditional social institutions as well. Instant communications, swift travel, widespread economic enterprise, and social interdependence, as well as changing interpretations of the origins of the universe and the uniqueness of humankind, have led to radical alterations in the significance of churches, families, hometowns, traditions, inherited values. Even the avidly sought, remarkable increases in educational opportunity and achievement attained in many parts of our contemporary world can lead to disharmony between employment needs and opportunities on the one hand, and the expectations and characteristics of training and education of many persons in the labor force on the other, with debilitating personal and disruptive social results.

There are large dimensions to the paradoxes of material plenty. I will make one more comment about them by quoting Dr. Soedjatmoko, former Indonesian Ambassador to the United States, who a year ago spoke at the Centennial celebration of Bill Scott's and my university, Vanderbilt. Noting

some of the problems faced within the United States and elsewhere, he said:

" . . . we are brought up short by our awareness that with our own fragmented knowledge we lack the concepts and the analytical tools that would allow us properly to define these problems and to gain purchase on their solution. In part these problems are the result of the phenomenal growth of systematic knowledge itself and the technology it gave birth to during the past two centuries. They have reshaped the natural conditions of peoples' lives and created a new environment which gives us great power and has opened up unparalleled new opportunities for the fulfillment of our needs, for the enrichment of our lives but also for its destruction. They have at the same time also imposed on all of us the terrible psychic burden of living with continuing and continuously accelerating change as a permanent condition of our lives in directions which seem to escape our control. In principle, mankind should now be able to fulfill all of its material wants. Still, poverty remains the seemingly permanent condition of hundreds of millions in large parts of this globe. We have developed the most sophisticated instruments for the expansion and transmission of knowledge, but the number of illiterates in the world is growing both in relative and absolute terms. We know much more about the individual and human nature through scientific inquiry, but we cannot seem to avoid having to spend a large portion of our resources for armaments, and violence has become our permanent companion in modern life."

It is easier to speak of the problems that flow from material abundance than it is to examine the effects of our extraordinarily durable and successful American political system. Such is especially so when cherished values of democratic dogma are involved. Consider the accelerating expectations for liberty and equality. One is on tender ground even to hint that problems may flow from expanding the definition, or extending to new groups—minor children, for example—the application of the definition, of liberty or of equality.

I, at least, am tempted to think that liberty and equality are like wisdom and justice. By definition, we cannot have too much of them. But problems do flow from the need to define what we mean, or what we believe the founders of the nation meant by liberty, and by equality. The gravest problems flow from the need to define

what we want liberty or equality to mean in the future. Into that process the difficulties, or the appearance of the difficulties, of excess can enter.

Let us look at some of the uncertainties of definition. The courts, the Congress, and the President have been wrestling in recent years with such issues as equal educational (or employment) opportunity *versus* equal educational (or employment) results, as equal present opportunity *versus* compensation for unequal past opportunity. In each of these cases, which is the goal the nation should pursue?

Our governmental leaders have also been concerned with how, for another example, to interpret and apply the First Amendment to the Constitution, which reads in part as follows:

"Congress shall make no law . . . abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

Few have ever argued that speech and press can be totally unrestrained. In most places, one may not exercise his freedom of speech nightly by bullhorn to the effect of disturbing his neighbors, nor disrupt a string quartet concert with a public address. But controversies arise around issues of taste and, especially in these days, the asserted effects on children of what is carried by print and broadcast media. Ultimately, the question asks whether a society has standards and values it can identify and can properly seek to encourage. The counter question asks whether a society *should* seek to identify standards and values and *should* seek to encourage them, or impose them on individuals. The issue goes to the basic assumptions of our culture.

My concern is with degree, with how one expands concepts of freedom in a way that yet achieves the optimum harmony of a society's values. Freedom of press could be so unrestrained as seriously to deny other values we also seek to respect, privacy, for example. The search to assure literal equal opportunity for all persons could also run athwart other values, the right to acquire and transfer property, for example.

It is awkward for public figures to express any view about such values as liberty and equality except to urge their extension. The paradox is that failure to define and restrain their meaning in operation, and the failure to seek to reconcile them with other goals we cherish, can threaten their own realization. The social and political

context that they require in order to flourish is ultimately fragile, and its viability depends on a structure of compatible values that is widely respected, and also on widespread understanding and support for the definitions of liberty and equality that are applied in the society.

Here is the paramount irony. The United States is the most productive and freest society, possessed of the greatest opportunities for individuals, among all comparable political entities in the world's history. Yet it is beset by problems so fundamental and intractable as to erode our faith in our own destiny.

We are not truly sure that we can provide health care and educational services of the kinds our people want, even less sure we know and can provide the kinds they need, and we are especially unsure that the United States can afford either. The paradoxes of plenty should be notably conspicuous to the providers of health care and education.

A symbol of our frustration is the present condition of the United States Government's annual budget. We now have a level of accumulated federal indebtedness that inescapably raises questions about the ultimate efficacy of government. Burdensome debt-carrying charges not only lead to deficits and inflationary pressures, but they also severely handicap government's capacity to address effectively its whole range of responsibilities. Such conditions can, in addition, tempt a government, including our own, to search for ways to meet problems through social and economic interventions that would restrict both liberty and equality.

Frustration sometimes produces bewilderment, sometimes fear, sometimes determination. Whatever the reaction, the course and response lie in public policy—affirmative policies, or passive policies, or sometimes the policy of having no policy. By "public" policy I do not mean government policy alone, but rather the nation's total behavior, including the attitudes and actions of individuals and groups.

In times of bafflement or despair, when difficulties seem beyond mastery, individuals sometimes retreat into mysticism. Comfort may be achieved, at least for a while. The retreat is usually an abandonment of responsibility. We have seen some of this in American history not excepting recent years.

More generally in times of travail, we instinctively look for leadership. We seek to find a

leader who will shoulder the common burdens, show the way out of the darkness, and comfort the rest of us by the knowledge that he is doing so.

There have been occasions in American history when, quite literally, the future of all then living, and the lives of each here present, were directly influenced by leadership of an individual: Thomas Jefferson formulating the hopes and aspirations of independence, George Washington presiding over the Constitutional Convention, Abraham Lincoln preserving the Union, Franklin Roosevelt restoring a people's spirit and leading them in war, are four cases. Such leadership, or that of Theodore Roosevelt or Woodrow Wilson, emerges in each case from a particular context, from a special confluence of needs. When an individual strongly suited to his time appears, the leadership is remembered. October of any presidential election year is a season to remind us that leadership is often offered as the best solution to all our problems.

America's and the world's present condition calls for more, I think, than the strength, vision, courage, integrity, ingenuity, and ambition of a great leader, whether as president or in another capacity. Such leadership is to be devoutly hoped for and gratefully appreciated—always. But I think the American condition is now different in fundamental ways than it was at the founding of the Republic, during the Civil War, or in the Great Depression and World War II.

Each time of crisis is of course different from its predecessors. Our present grave condition, however, is of a different order from its predecessors. It is much more a chronic condition than a distinctively defined crisis. If I may indulge in an Irish bull, it is a chronically acute condition.

By what public policies do we address this condition?

I am conscious that I am speaking to elegantly trained and expert practitioners of highly specialized professional skills. There is greater certainty to much of what you do than enjoyed by a political scientist or university officer like myself. It is yet another paradox that with so much that is certain and controllable in the world, there is so much more that is unpredictable and unmanageable.

The tasks ahead belong to all of us. Acceptance of that fact is necessary for effectiveness of the "public policies" I propose as requisite for a viable American future. Some of what I suggest may

strike you as excessively abstract, or so demanding of personal self-control as to run against nature, or calling for such vision as to require radically changed cultural conditioning, or to mean such a revision in established institutions and expectations as to be revolutionary. Perhaps so, but we are a practical people, reared in liberal Western traditions of adaptability and give-and-take, realistic in knowing that the alternative to doing what a situation requires is to languish with the consequences of not doing so. In our case, the consequences no more than 50 years from now may not be tolerable.

We need to adopt three basic stances. I will speak to each separately.

There is a painting by Philippe de Loutherbourg that portrays in burning, sun-red hues the incandescent glow of the 18th century Darby blast furnaces at Coalbrookdale in Shropshire. It would seem to be of a hell on earth, or of the hell hereafter.

Robert Burns, whose poetry celebrated simple things, was not the first, nor were Vanderbilt's agrarians of half a century ago, whose noted book, *I'll Take My Stand*, deplored the dangers of more complicated things, the last, to know the two-edged sword of science and invention.

And I have tried in these remarks to make it clear that the uses of knowledge and the consequences of knowing are not automatically and invariably beneficial to humankind.

Yet—call it still another paradox, if you wish—there is now no turning back, and to become the masters of our fate requires the purposeful extension and application of knowledge. Because dominant problems in our lives are traceable to knowledge-based technology, that is no argument to retreat now into anti-intellectual know-nothingness, into a mystical nihilism. The rich glories and incredible privileges of present life for many—including all in this hall—and the unprecedented hopes we hold for all humankind, stem also from that same base of knowledge. Our urgent task is to develop the new information, new concepts, new strategies that will permit the amelioration and solution of our problems. We have no practical choice but to try.

How we try will make a difference. We have extraordinary national resources of investigation, knowledge, and invention. Yet they will not serve without enhanced skill in directing them toward the goals we seek. We need a magic amalgam of

government policy and private enterprise. The requirements are stern.

I read recently a passage from a new publication of the Brookings Institution, *Setting National Priorities: The Next Ten Years*, by Henry Owen and Charles L. Schultze. The authors stated:

"In domestic as in foreign policy, the place to start is with a sober analysis of what government can and cannot do well. Ten years ago a review of major economic and social problems would have concentrated on asking how government might best deal with them. In today's climate of public opinion the same kind of review must begin by asking whether government is capable of dealing with them. Ten years ago government was widely viewed as an instrument to solve problems; today government itself is widely viewed as the problem."

This is not to call for a less decisive government, but to call for an increasingly wise government.

The greatest leverage knowledge can give us on contemporary difficulties is through better definition and understanding. Infantile paralysis was effectively eliminated by research and insight—not by attending physicians and iron lungs, essential though they were and are to stricken victims. In other realms of need, definition, research, insight, understanding can make for solutions, too. Someone said that there is no power like that of an idea whose time has come. There is no multiplier of effective effort like systematic, timely thinking. In our new world, optimum practice in energy and resource use, in population control and food production, in health and education, in armaments control and international finance, in almost anything, will not emerge by chance, nor solely from good will.

National policies to enhance the central thinking organs of our society, public and private, including research-intensive universities and institutes, are needed if we are to surmount the physical and social dangers that confront us. We cannot meet our needs by simply doing more and more of the same that we have been doing—whether in seeking to improve education, or medicine, or social welfare, or international negotiations, or living standards, or legal justice, or whatever, including ethical behavior and constructive social values.

That brings us to the second basic stance that I find necessary.

Pursuit of more effective powers of mind will

not by itself suffice for the future. The future requires commitments to a general welfare, to a concept of human unity—commitments rooted in the realistic, pragmatic understanding that our individual destinies are, in truth, so inextricably intertwined with each other that they are for practical purposes one.

The achievements of American government are remarkable. Our political system may arguably be called, for a society of anything like its scope and diversity, the most extraordinary achievement in human organization and polity. In its net consequences it has served us well. The question now is whether it is adequate for the future.

As a political scientist, I am much conscious of the competitive political aspirations of interest groups, and of the theory that through the competitive clashes of narrow purposes in our political processes a net gain and good for the Republic result. The concept is to some extent analogous to the argument on behalf of a fully unfettered competitive economic system. No one of course argues for either in a pure state. But in a mounting complex and interconnected social system, concepts of the general good, of the national interest, of a world interest, increasingly require encouragement.

One theory of representation imposes on the elected official the obligation to represent the articulated interests of that segment of the electorate that gave him office. A different theory of representation calls for the official to pursue the interests of the larger whole of which smaller constituencies, including his own, are component parts.

We need to shape our political institutions and encourage our political expectations to strengthen the latter concept of political obligation. In contrast to some systems elsewhere, the United States has a highly responsive set of political institutions. We applaud this feature when our own special concerns are well attended by officials, and deplore it when we find that our competitors for political decisions prevail. We must in our institutions, in our officials, and in ourselves encourage loyalty to broadest community objectives—be they local communities, the national community, or the world community.

Recent changes in regulations governing the financing of presidential election campaigns illustrate institutional changes that contribute to this end. These changes, including public financing of some campaigns, help to free candidates from

obligations to financially robust special interests, and from those who collect political money on behalf of those interests.

Other institutional changes can improve the potential for broader political vision and consequently for more effective democratic government. I have come to wonder whether a Bicentennial Constitutional Convention in 1987 could usefully recast some of our federal procedures and structures. The procedures for nominating presidential candidates, the length of term of members of both houses of Congress, the sizes of the jurisdictions they represent, the powers exercised by the branches and levels of government, the protections accorded individuals, and other qualities of our system would benefit from the kind of deliberative processes that characterized the Constitutional Convention of 1787.

Concepts of common allegiance, of a larger welfare, require renewed assertion and strengthened loyalty in all reaches of our society. In recent decades it has not been so much the fashion as once it was to extoll the virtues of national obligation and patriotism, of a superior general good within each arena of our lives, to which we owe loyalty above particular interests.

To advocate these qualities of expanded loyalty is not to diminish the importance of individual and group determination to right the wrongs of an imperfect society. But it is to say that in the long run the self-centered objectives of all will have a better prospect for lasting realization if we recognize the realities of our common destiny.

It is difficult to inspire enthusiasm for the third stance that I find necessary for our future. Yet, like a plea for morality, it rests unassailably on ultimate realism. Moderation is the quality of which I speak.

I was struck growing up in Savannah by the unusual fact that the Georgia State Seal bears—has long borne—the word Moderation, along with the words Justice and Wisdom. For a while I was perplexed why Moderation was in that triumvirate. Certainly it is not one of our celebrated national abstractions like Justice and Wisdom. But the social utility of Moderation has become increasingly apparent as our national and world societies have become ever more intensively organized and intricately interdependent, and as accelerating rates of change have wrought revolutionary alterations in almost all conditions of human life.

Moderation means self-restraint. Self-restraint is not a frequently celebrated quality. Yet I doubt that a popular, republican government like ours, in a highly organized, diverse, pluralistic society like ours, can function successfully in the world we are entering without the moderation of self-restraint. Moderation means modifying immediate expectations: political, economic, social, personal, public expectations.

We all want more, and to be better. Ambition for more and better is a driving dynamic—difficult, let us say impossible, to modify for a large population. But “more” and “better” are not always the same, and more now is not always compatible with the goal of more later. And people are capable of discerning where their largest interests lie.

A changed stance, not a changed national ethos, is required to develop our capacity to fit our expectations of society to society's capacity to fulfill them. We have resources to draw upon. Persons reared in the liberal political and intellectual traditions of the English-speaking world have demonstrated considerable ability to be flexible, to negotiate, to compromise in order to

achieve consensus, even on occasion peaceably to give up wealth and power, because they had the temperament and wit to see that the alternatives were less preferable. We will need in future all such qualities as we can muster.

This is not just to say, however, that informed and prudent people will need to take a long view. They also need to seek and seize a richer, far more varied set of satisfactions than afforded by the narrow confines of material resources. As world populations expand, as pressures on resources increase, as geographical frontiers disappear, as basic material needs are satisfied within specific populations and areas now deprived, persons intelligent and imaginative enough to find new forms of satisfaction in our infinitely varied and intriguing universe will avoid dislocation and frustration as, inevitably, material rewards are shared more equitably among the disparate parts and populations of the globe.

All of this is to say that, if we would survive, we must become persons of more robust intellect, of greater vision and deeper insight, and of wise humility and compassion in understanding our divine unity as a human race.

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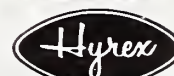
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Physician Recruitment Reception Held In Memphis

A physician recruiting program recently organized in an effort to help interest resident physicians in remaining in Tennessee has been received with considerable enthusiasm from physicians, hospital administrators, legislators, and community leaders across the state.

Spearheading the campaign is the Tennessee Hospital Association which in July launched a series of receptions for resident physicians in the Memphis area, providing them an opportunity of meeting and talking with physicians, legislators, and community leaders from across the state who are interested in securing more physicians for their area.

Many residents are recruited by hospitals and communities in other states because they are not aware of the opportunities for practice in Tennessee. This is an effort to make young physicians aware that there are as many attractive opportunities in Tennessee for locating and developing a practice as there are in other states.

At the Memphis reception, representatives from 31 Tennessee communities were introduced to 40 resident physicians who are in their final stages of medical training.

Lieutenant Governor John Wilder of Nashville represented the Tennessee General Assembly and there were representatives from the offices of U.S. Senator James Sasser and Representative Harold Ford.

Also present at the reception were Dr. T. Albert Farmer, chancellor of the University of Tennessee Center for the Health Sciences, and Jim Marler representing the Tennessee Hospital Association staff.

Physician shortage continues to plague many smaller communities as well as some more populated areas in Tennessee. The Tennessee Medical Association as well as many other groups, both medical and lay, are well aware of these medically underserved areas and are participating in various programs to train medical students who hopefully will establish practices in these areas upon completion of their medical training.

Unfortunately, far too many medical graduates move to other states to set up practice upon completion of their internship and residency, in

many instances leaving the medically underserved areas still searching for medical relief.

Annual receptions will be held in Nashville, Knoxville, Chattanooga, and Memphis. 



Tennessee's Lt. Gov. John Wilder (left) welcomes UT resident, Dr. Barton Warner.



T. A. Farmer, Jr., M.D., chancellor of UT Center for the Health Sciences (left), Lt. Gov. John Wilder (center) and James D. Marler, senior vice president, Tennessee Hospital Association (right).



DAVID H. TURNER

President's page

Freedom

"Freedom is seldom lost all at once, but rather in small degrees."

—David Hume, British philosopher (1711-1776)

It was the same year that historian essayist David Hume died that the greatest experiment in personal freedom ever known on a national scale was born. The founding fathers of our great nation were men of unusual wisdom and ability. They were able to develop a constitution as a basis for government—a representative republic of federated states—which has provided an atmosphere for personal freedom never before experienced in a civilized nation. The desire to live in a nation without binding restraints on economic activities and limitations on ability to move about freely brought many hundreds of thousands of immigrants to this country during the first 150 years of our nation's history.

We still have the greatest homeland on earth, but it seems evident we are losing our freedom by degrees. During the past 50 years, government has grown almost incomprehensibly; regulations and government interference have become stifling. No longer is it sufficient for government to guarantee to every citizen the free and inoffensive use of his facilities for physical, intellectual and moral self-improvement. Politicians are responding to the ever-increasing demand for security and welfare—cradle to grave. This is the seductive lure of socialism but we must realize that for every degree of security provided by government, we lose a degree of freedom.

Samuel Gompers said, "Look over all the world where you will, and see those governments where the features of compulsory benevolence have been established and you will find the initiative taken from the hearts of the people."

The practice of medicine in the United States has flourished in the atmosphere of freedom. The doctor has had the privilege to practice wherever he desired and was needed. The patient has had the privilege to choose the doctor he preferred. This so-called nonsystem of health care has proven to be the best system ever.

Medical practice is at a crossroads in our country at this time. In the near future our representatives in Congress will be deciding whether we continue in this atmosphere of freedom or whether the practitioner of medicine becomes a government employee or contractor.

At a recent AMA leadership conference a British National Health Service administrator advised, "Do not make the same mistakes as we have. You can surely see that the greatest good, both for the patient, the profession, and the government itself, will come from leaving the profession *free from constraint*. Do not be misled by the overtures of the government: fight against the elimination of the insurance mechanism, oppose the contracting of physicians to government, and above all, resist having your physicians in the employ of government."

The AMA is striving to insure that any medical care legislation passed by the U. S. Congress preserves those freedoms which have served to benefit the citizens of this nation.

It is my opinion that if the citizens of this great nation and their representatives in Congress can be made to understand the real issue—freedom or nonfreedom—government medicine will be rejected and private medical care can be perpetuated in an atmosphere of freedom.

Our challenge is to inform.

Sincerely,

David H. Turner, M.D.

PRESIDENT

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SEPTEMBER, 1977

editorials

Cancer Answer

Playing with words is one of man's favorite pastimes, and medical students used to, and probably still do, like to tamper with eponyms. An onomatopoeic concoction from the past is the "Percival Potts puffy tumor," which may or may not refer to anything at all. But in any case, in 1775 Dr. Potts did make the observation that chimney sweeps developed "soot warts" on the

scrotum which after many years became large tumors which could go on to kill. In 1843, at a time when the cellular character of tumors was first coming to be recognized, Curling wrote a definitive description of scrotal cancer in chimney sweeps.

Just 100 years after Potts' observations the investigation of the genesis of cancer began with von Volkmann's conclusion that the cancer occurring in industrial tar and paraffin workers around Halle was due to chronic irritation by chemicals. The list of carcinogens and suspected carcinogens is now, another hundred years after Potts, long indeed. Among the latest are polyvinylchloride, chelating agents, and, lo and behold, saccharin. Civilization is belching forth carcinogens by the barrelful, and the end is not in sight.

Somewhere along the line somebody realized all this was bad for you and ought to be controlled, and the FDA, which originally was set up to monitor food and drugs (mostly cosmetics) was put into the act. We finally got the Delaney clause which banned out of hand any substance which can be shown to produce cancer in man or animals. Period. This, of course, unqualified, includes practically everything, maybe even water.

One of my medical school teachers, a surgeon, observed that probably within my lifetime cancer would cease to be a surgical disease, because it would probably turn out to be metabolic in origin and medically treatable. What we are looking for now, of course, is something which will, even more selectively than radiation and some of our present antimetabolites, kill cancer cells and spare the normal ones.

For a while, back in the '50s and '60s, it looked as if viruses were the culprit, and all we needed to do was find a way to kill the viruses or to neutralize their effect. It turned out that sure enough viruses probably do cause some cancers. But not all. Now an investigator at Michigan State has made the statement, probably correct, that we will never find a cure for cancer, because cancer is not a disease. It is many diseases.

Tissues and the cells which make them up can react morphologically to stimuli in only a few ways, regardless of what the stimulus is. Unless one can find the organism, it is hard to tell whether a granulomatous reaction is due to the tubercle bacillus, an atypical mycobacterium, histoplasma, cryptococcus, or what. The same is

true of carcinogens. On the other hand, what is going on in the cell's works may be a lot different in each of them. But the situation is not hopeless. We have just had to attack each infectious disease one at a time. There are other ways to tell them apart, and slowly but surely infectious diseases have come under control. The cure depends upon early institution of proper treatment. Proper treatment depends upon accurate and early diagnosis.

In dealing with cancer, we can learn a lot from our experience with infectious diseases. Preventive medicine is important. We do not knowingly expose ourselves to an open case of tuberculosis, so why should we (editorial "we"—*I Quit*) keep pouring cigarette smoke into our lungs? We do not ignore red streaks spreading from a cut, so why ignore bleeding or a lump? We have progressed a long way with the surgical treatment of cancer. Progress is being made in chemotherapy. There is already a lot we can do—the earlier the better.

The future may not be as bright as our fondest dreams, though it seldom is in any area of life. But neither is it hopeless, or even as gloomy as it often appears. Maybe there will never be a cure for *cancer*. But there will be, and even already are, *cures for cancers*. The answer is, as it is for any other illness, early detection, for the early institution of proper treatment. Investigation is being carried on in many areas to make all that possible.

We need to make more of an effort in public education. We need to get to people *before* they become our patients, because there is a lot *they* can do to prevent it. Because medical students find courses in preventive medicine dull, the doctors they become are not very interested. Neither, apparently, is the public, except insofar as it involves other people.

The responsibility for changing that attitude rests to no small measure with you and me.

J.B.T.

While the Earth Remains

This has been the driest summer I remember; the drought started a month earlier than usual, and though it is true the summer is not over yet, there is no relief in sight. By mid-July our yard looked like it does in the fall. I'm past worrying about the lawn; it looks now as if we'll lose some trees. The drought seems the worst ever, at least in the nearly 20 years we've been in our present home.

Yet memories are notably short, especially where things like weather are concerned. There have been few records set this summer and when dates are given, the record high temperatures have been scattered through the late '40s and '50s. You can read in one place that the world is cooling off, in another that it is overheating, and in still another that it is drying up. It can all be proved by statistics, and for seemingly valid reasons. And yet one writer, possibly the most objective because he apparently had no axe to grind, pointed out that weather is notably cyclic, not only over the centuries and millenia, but for the short term as well.

A couple of weeks ago I spent a weekend in the Great Smokey Mountains National Park. I arrived at Cades Cove before eight, about an hour after sunrise. I had the place to myself for about the first hour, and the Smokies were indeed smokey. I got to watch the drifting fog being burned away across the cove and in the surrounding hills and mountains. No drought here. The woods were wet and dripping, the grass dew-dropped and cool from a shower the night before. Up the trails, bright multicolored fungi peeped out from under the leaves and pine needles covering the forest floor and clung to stumps and trunks of fallen trees. An occasional horror popped up, offal of civilization dropped by the uncivilized—a soft drink can or paper cup. Mercifully these were few, but they introduced a jarring note into the peace and harmony of the valley.

The only sign of the drought was diminished water in the streams, but they seemed about normal for this time of year. I was told they had been replenished by a good rain the week before; Laurel Falls was as lovely as ever. Trailside markers tell us the mountainside in that area was logged over in the years before the park opened about 45 years ago, and that forest fires had also burned it over on occasion, so that the forest there consists now of relatively new growth, and no forest giants remain. Those were mainly chestnut oaks, which were destroyed by the blight of the '30s.

The markers went on to say that the first trees to appear on a reforested mountainside are the pines. They grow in competition with hardwoods—oak and poplar—and eventually lose out because they do not do well in shade. Hemlocks do, though, and later the trees are mostly tall hardwoods and lower hemlocks, making the

forest floor dark and brooding, with little undergrowth. Finally the oaks and hemlocks go, and beeches, poplars, and so on, remain. Periodically the floor is purged by fire. Except in extreme drought, the larger trees are not killed. The forest continues to renew itself.

The first words to go by Samuel F. B. Morse's telegraph, in May, 1844, were, "What hath God wrought!" We need to remember that the forests and meadows were here before man wrought anything, and that in fact the problems we face have a great deal to do with man's works and his tampering with nature. It was widely predicted until very recently that man was about to tame nature. Now one western state is being sued by another for stealing its rain by cloud-seeding, man-made reservoirs in the West are drying up, whole mountains are stripped for coal or metals and what remains is washed away by flooding streams. Some of our earthquakes are thought to be caused by earth shifts due to man's removal of underground gas, oil and water.

Tame nature? She is a tough opponent, and from the looks of things man would do well to forget about that and learn to live with her. In the meantime, we have God's promise that, "While the earth remains, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease."

There is a condition: "While the earth remains." Sometimes we seem to be doing our utmost to see it does not.

J.B.T.



Request for Information

To the Editor:

We of the Cumberland Chapter of the National Hemophilia Foundation have recently initiated a project which is part of a national effort to develop a registry of hemophilic patients. Although this may ostensibly seem to be a rather simple task since the hemophiliac's symptoms are quite pronounced and somewhat rare, because of isolation or lack of severity or the relative newness of the State Hemophilia Program, we feel that there are, unfortunately, persons who have not yet contacted the Foundation or the State Program. Both organizations have invaluable services to offer the hemophilic patient;

we are therefore asking persons in the medical profession to systematically survey their bleeding disorder patients and have those who have not done so, contact us or Mr. Ralph Maxwell, coordinator of the State Hemophilia Program, Ben Allen Rd., Nashville, TN 37216; Tel. (615) 741-7206.

We realize that such requests upon physicians' and nurses' time are frequent and are therefore easy to ignore. But we feel that this project presents a special urgency since the ability to determine accurately present and future blood needs is a goal that affects every segment of the population and is of utmost importance.

We assure that all information gathered will be kept in strictest confidence and will not be released (except in aggregate statistics) without prior consent of the patient or patient's family.

Mark A. Hall
Director of Special
Projects/Statistician
Cumberland Chapter of the
National Hemophilia Foundation
One Maryland Farms
Brentwood, TN 37027;
(615) 373-0400



Richard Carl Light, age 63. Died July 26, 1977. Graduate of Ohio State University School of Medicine. Member of Nashville Academy of Medicine.

Thomas S. Long, age 63. Died June 18, 1977. Graduate of Washington University School of Medicine. Member of Chattanooga & Hamilton County Medical Society.

Clement H. Marshall, age 83. Died July 16, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

Doris L. Upchurch, age 57. Died December 14, 1976. Graduate of University of Louisville School of Medicine. Member of Roane-Anderson County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

GREENE COUNTY MEDICAL SOCIETY

Michael W. Bean, M.D., Greeneville

KNOXVILLE ACADEMY OF MEDICINE

David A. Birdwell, M.D., Knoxville

Michael V. Otis, M.D., Knoxville

Vijaya R. Patil, M.D., Knoxville

NASHVILLE ACADEMY OF MEDICINE

Glenn H. Booth, Jr., M.D., Nashville
M. Terry Burkhalter, M.D., Nashville
Wesley L. Coker, M.D., Nashville
Robert S. Cooper, M.D., Nashville
Robert B. Faber, M.D., Nashville
William M. Gavigan, M.D., Nashville
Ronald Gilmer, M.D., Nashville
James H. Haynes, M.D., Nashville
Robert E. Mallard, M.D., Nashville
Gilmore M. Sanes, Jr., M.D., Hendersonville
John A. Shields, M.D., Nashville
Lucien C. Simpson, M.D., Nashville
Robert B. Snyder, M.D., Nashville
Song W. Wong, M.D., Nashville

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Carl Slocum, M.D., Kingsport

personal news

Walter M. Boehm, M.D., Chattanooga, has been elected president of the Birth Defects Center board of directors. Nicholas Forlidas, M.D., Chattanooga, has been elected assistant treasurer and assistant secretary. The center provides medical assistance to children with birth defects at no cost to the patient or the family.

Harold W. Jordan, M.D., Nashville, commissioner of the Tennessee Department of Mental Health, has been awarded the Citizen of the Year Award by the Most Worshipful Prince Hall Grand Lodge of Free and Accepted Masons of Tennessee.

Victor W. McLaughlin, M.D., Oak Ridge, has been elected first vice president of the East Tennessee Chapter of the American Heart Association.

John B. Thomison, M.D., editor of the *Journal of the Tennessee Medical Association* since 1971, has been elected editor of the *Southern Medical Journal*. He assumed his new editorship duties for the Southern Medical Association July 1. Dr. Thomison will continue to serve as editor of the *TMA Journal*.

medical news in tennessee

UTCHS Announces Appointments

Dr. Amoz Chernoff, newly appointed associate

vice chancellor for academic affairs at the University of Tennessee Center for Health Sciences-Knoxville Unit, is the principal investigator of a National Institute of Health study of cystic fibrosis, an important hereditary disease and a major killer of children in this country. The Cystic Fibrosis Foundation has been awarded a one-year contract—funded by the National Institute of Arthritis, Metabolism, and Digestive Diseases and the National Heart, Lung, and Blood Institute for this in-depth study.

Dr. Chernoff, for many years director of the University of Tennessee Memorial Research Center, recently took an 18-month sabbatical leave from the Research Center and served as the national medical director of the Cystic Fibrosis Foundation in Atlanta. On return to Knoxville in July, he assumed his new duties as associate vice chancellor, while relinquishing the Research Center leadership role to Dr. Robert Lange, formerly assistant director of that unit.

Dr. Chernoff is assisted in the cystic fibrosis study by Dr. Charles Congdon, research professor, University of Tennessee Memorial Research Center.

Tennessee Wins AMPAC Award



Tennessee was one of 19 states receiving recognition from AMPAC for having 100% of its leadership delegation become sustaining members of AMPAC—American Medical Political Action Committee. David H. Turner, M.D., President of the Tennessee Medical Association (left) accepted the award from Michael P. Levis, M.D., secretary-treasurer of AMPAC at the AMA's 126th Annual Convention in San Francisco.

From the AMA's Office in Washington

Hospital Cost Containment Gains Momentum

Strong pressure from President Carter and other administration officials and a desire by Congress to get some handle on rising health care costs appear to be weakening Congress' previously firm sentiment against the administration's Hospital Cost Containment program. Some hill observers now believe the plan—in some form or other—is picking up enough momentum to clear Congress this year, a possibility viewed as remote earlier in the session.

The Cost Containment plan calls for imposition of an annual ceiling of about 9% on all hospital revenue increases. It places a \$2.5 billion limit on capital expenditures. Major health provider groups, including the AHA and the AMA, have assailed the plan as a revival of the discredited wage and price freeze several years ago.

Other versions of the administration's plan, however, are taking shape in the Congress. Here are some recent developments:

- Rep. Paul Rogers (D-Fla.), chairman of the House Commerce Subcommittee on Health, has introduced a modified version of the administration bill and held one day of public hearings.
- The House Ways and Means Subcommittee on Health headed by Rep. Dan Rostenkowski (D-Ill.) has started marking up a measure following introduction of a version by Rostenkowski.
- Sen. Edward Kennedy (D-Mass.) called his Senate Human Resources Subcommittee on Health to put together a bill containing major elements of the administration plan.
- Sen. Richard Schweiker (R-Pa.), ranking Republican on Kennedy's subcommittee, has introduced an alternative plan that would beef up state control of hospital costs and prohibit capital expenditures for 18 months. Schweiker has been joined by Sen. Thomas McIntyre (D-N.H.).

Public hearings now have been completed on the issue by three of the four congressional committees with jurisdiction. The exception—the Senate Finance Subcommittee on Health—has conducted public sessions on legislation by Subcommittee Chairman Herman Talmadge (D-Ga.) that is limited to restrictions on Medicare-Medicaid spending by hospitals, but could be broadened to include all revenues.

Congress takes a month vacation during August and leaders are pushing for an October recess date. This does not leave much time for the four involved committees to resolve their differences and agree on such a volatile issue as controls on one segment of the economy.

The AMA has testified that the Rogers' bill "un-

fortunately retains those programs which would in effect allow the (HEW) secretary to determine revenue increases, capital expenditures, and utilization rates." The arbitrary limitations on revenue increases "would prove to be disastrous for many hospitals, especially to the already more efficient hospitals and those hospitals which are located in rural areas," said Edgar T. Beddingfield, Jr., M.D., chairman of the AMA Council on Legislation.

The major changes made in the administration plan by Rogers would extend the government's power to regulate the purchase of new major medical equipment, provide incentives for hospitals to eliminate services, and award hospitals for cutting costs. Dr. Beddingfield lauded the concept of incentives, but questioned the details of the new plan.

The AMA official said that financing incentive payments to hospitals out of general revenues raises constitutional questions. "Should Congress pay out of the general treasury amounts to hospitals for providing services for which the federal government otherwise has no obligation to pay?" he asked, noting that all inpatients, not just federal beneficiaries, would be covered.

Under the measure, expensive equipment purchased for use in a physician's office could be subject to a certificate of need restriction. Dr. Beddingfield attacked this provision. "Any initial inroads into medical practice seeking to control physician offices or the acquisition of practice equipment would jeopardize the independent practice of professions," he said.

Dr. Beddingfield continued: "Such an action could only lead to more stringent controls eventually controlling practice locations and extent of services available and affecting quality of care. Medical practice—the physician's office in particular—should not be treated as a public utility."

The Carter administration also opposed the amendments recommended by Rogers. Sticking to their game plan of fighting for its proposal with no changes, HEW officials told the House Commerce Health Subcommittee that the suggested changes "have much long-run potential," but "often raise more questions than they resolve."

Karen Davis, deputy HEW assistant secretary for planning, said "we simply do not have the time to refine proposals (such as those in the Rogers bill) to ensure that they have the desired effect and preserve administrative simplicity." The Hospital Cost Containment Act as originally proposed should be enacted "as the first and desperately needed step in devising a permanent solution to the critical national problem of controlling rising health costs," she said.

Patient Package Inserts for Drugs

A bill before the Congress would mandate that prescription drug packages would carry a warning label stating:

"Warning to physicians and patients—the Federal Food, Drug and Cosmetic and Devices Administration approves this drug or device

for the following purposes and no other purpose."

Drugs would be accompanied by patient package inserts approved by the FDA explaining in layman's language the uses of the drug, a description of the side effects, and so on.

This provision of a sweeping drug measure proposed by Sen. Edward Kennedy (D-Mass.) was attacked by the AMA. "By setting out in bold print and by directing the warning to physicians and patients, the statement raises a spectre that a drug as prescribed is dangerous," said Lowell H. Steen, M.D., a member of the AMA's Board of Trustees. "We believe that such a phrase unduly intrudes into the practice of medicine in an attempt to limit in some manner the use of a drug," said Dr. Steen.

"To mandate a drug label warning that in any way suggests that a drug can, because of special federal approval, be used properly for only certain conditions and not for any other condition is an improper attempt to restrict the necessary freedom of the physician to prescribe the needed treatment," Dr. Steen said.

Dr. Steen noted that the AMA supports certain additions to the drug labeling requirements and has drafted a bill that would require certain information to be listed on the drug container dispensed to the patient.

But, he told Kennedy's Health Subcommittee, "it is highly inappropriate to include a requirement that the proposed warning be placed on all drug labels. Moreover, we believe that all drugs should not be required to have patient package inserts. The preparation and distribution of the information to be required in the patient package inserts pose a number of problems. Patients differ in their drug requirements with respect to dose, duration of therapy and adjunct medication. They also differ in therapeutic response, adverse side effects and toxic reactions. 'Patient package insert' might be helpful to some patients, but might confuse, frighten or even harm other patients."

The most appropriate source for a patient desiring drug information is the physician. The AMA official testified "we do not believe that it is desirable for the commissioner of FDA to publish mini-treatises on drug usage for dissemination to patients for all drugs. A professional judgment on what is the best treatment for the patient is the physician's responsibility and is made on the basis of extensive training and experience."

Dr. Steen spoke favorably of a Kennedy provision for an expanded drug-testing program for drugs that have not yet received new-drug application approval. This, he said, "could be highly beneficial in bringing new drugs and chemical entities to the market as expeditiously as possible. There have been indications that our present system of new-drug approval has led to a relative drug lag between the United States and other industrialized countries."

HEW Regionals' Power Gutted

Much of the autonomy and power of the ten

HEW regional offices have been eliminated in a major reorganization by HEW Secretary Joseph Califano.

Powers once vested in the regional directors were shifted to HEW headquarters in Washington, D.C., bringing to dust the goal of the Nixon administration to establish "mini-HEW's" with substantial independence to deal with regional problems. However, the ten offices with tens of thousands of employees across the nation will stay in business, but with much closer ties to the nation's capital.

Califano designated Eugene Eidenberg as deputy under secretary for intergovernmental affairs. "In this role, Mr. Eidenberg will be my principal liaison and point of contact on a daily basis with the PSROs," he said.

"In the past," he said, "there has been confusion about the role of the regional offices and often considerable discrepancy between the rhetoric that was used to describe their functions and their actual functions. The regional offices, on paper, were mini-HEW's and the regional director a field secretary with line direction over program operations in the field."

"Our five-month review of the regional operations has led to the conclusion that this has not, in fact, been the function of the regional offices and that it should not be," Califano continued.

Instead, the secretary said, "the reorganization is intended to provide clear and direct accountability between the program people in the field and their respective headquarters program offices in Washington, without the presence of the regional director as 'middleman.'"

The reorganization will make the heads of the department's major program divisions (the assistant secretaries and commissioners) accountable for all aspects of the operations of their program on a nationwide basis.

Califano said that the reorganization would be implemented gradually to avoid disruption of established operations and to minimize any adverse impact on HEW employees.

VA Drs.' Pay Increase Urged

The AMA is supporting a bill to increase Veterans Administration physician and dentist pay.

The legislation before the Senate would extend for one year authorization (Pay Comparability Act of 1975) for the administrator of the Veterans Administration to provide special pay to eligible physicians and dentists. The bill also provides that a physician or dentist who has entered into an agreement with the Veterans Administration which will be completed during the extended authorization period may enter into a new agreement not to exceed four years in duration.

In a letter to the Senate Committee on Veterans Affairs, James H. Sammons, M.D., AMA executive vice president said:

"The AMA has been supportive for many years of the federal government's efforts to recruit and

retain career-minded health professionals for federal health delivery programs."

"We urge that the Congress act favorably on this legislation and to assure the continuation of current authorities to provide more adequate and equitable compensation for physicians and dentists in the Veterans Administration health care system," said Dr. Sammons.

Thoughts on Controlling Health Care Costs

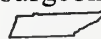
In remarks before a recent conference in Washington, D.C., on the subject of controlling health care costs, Lewis Thomas, M.D., president of Sloan-Kettering Cancer Center, shared these following thoughts with those present:

"The roster of major diseases that have become controllable within my lifetime made up the main body of the textbooks of medicine and pediatrics in the 1930s. Most of this transformation occurred in the field of infection, thanks to immunization and the antibiotics, but there have been improvements of comparable magnitude in other fields, notably hematology. And the change is still going on.

"There has never been a time like it, in all the long history of medicine, and the prospects strike me as brighter today than ever before. Of all times these are the unlikeliest for slowing down or stop-

ping science, or for trying to put restraints on technology. We will not be helped by restraining innovation, we will simply stay where we are, unable to change the largely unsatisfactory and costly things we are obliged to do for the diseases whose mechanisms we still fail to understand. And those diseases—heart disease, cancer, stroke and the rest—are not going to go away by themselves, nor are we going to be able to talk them away. The problems are much more complex and profound than most people realize . . . there is within medicine, somewhere beneath the pessimism and discouragement resulting from the disarray of the health care system and its stupendous cost, an undercurrent of unqualified optimism about what may lie ahead for the treatment of human disease—if we can only keep learning."

Richmond New U.S. Surgeon General

Julius Richmond, M.D., the newly appointed assistant secretary for health at the HEW Department, also will bear the title—long considered moribund—of U.S. surgeon general. This post hadn't been filled for several years. Though Dr. Richmond isn't a career Public Health Service officer, the resurrection of the title brought joy to the Uniform Corps which has been under constant threat of extinction but has managed to survive. The surgeon general is the top official of the Corps. 

Valley Psychiatric Hospital

P. O. Box 21373 • Shallowford Road
Chattanooga, Tennessee 37421 • Phone 615-894-4220

A 50 bed private acute intensive treatment facility with programs designed to treat psychological, alcoholic, and drug abuse problems of adults, adolescents and children.

A full range of treatment modalities are utilized including individual and group psychotherapy, chemotherapy, and adjunctive and family therapies. Adjunctive therapy includes continuing education through home-bound teaching for school-aged adolescents, recreational, occupational, and other supportive therapies. Group therapy is five days each week with individual therapy at least three days a week. Patients have six hours a day in scheduled therapeutic activities. Comprehensive outpatient services are available with outpatient group therapy sessions being held two nights each week.

Licensed by the State of Tennessee. A member of the Tennessee Hospital Association, the American Hospital Association, and the National Association of Private Psychiatric Hospitals. Accredited by the Joint Commission on Accreditation of Hospitals.

Psychiatry

D. Ross Campbell, M.D.
Henry Evans, M.D., Clinical Director
William C. Greer, M.D.
David V. MacNaughton, M.D.
John S. McDougal, M.D.
Robert T. Spalding, M.D., F.A.P.A.,
Medical Director

Internal Medicine Consultant
Charles D. Kennedy, M.D.

Clinical Psychology

Thomas L. Cory, Ph.D.
Jerry C. Gilliland, Ph.D.
Ann Morris, M.S.
Bobby G. Rouse, Ph.D.
Roy Smith, Ph.D.

Adjunctive Therapy
Dan B. Page, M.Ed.

Administrator
Dennis P. Dobard

announcements

CALENDAR OF MEETINGS

NATIONAL

1977

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|-----------------|---|----------------|---|
| Sept. 24-25 | AMA Regional Meeting, Holiday Inn, Chicago | Oct. 21-23 | Society of Nuclear Medicine, Aladdin Hotel, Las Vegas |
| Sept. 25-29 | Kentucky Medical Association, Ramada Inn-Hurstborne, Louisville | Oct. 23-29 | American College of Gastroenterology, Marriott, New Orleans |
| Sept. 27-30 | American Roentgen Ray Society, Sheraton Boston, Boston | Oct. 30-Nov. 3 | American College of Chest Physicians, MGM Grand Hotel, Las Vegas |
| Sept. 28-30 | American Society of Internal Medicine, Washington, D.C. | Oct. 30-Nov. 3 | AMA Regional Meeting, Honolulu |
| Sept. 30-Oct. 2 | AMA Regional Meeting, The Homestead, Hot Springs, Virginia | Oct. 31-Nov. 3 | Interstate Postgraduate Medical Association, Diplomat Hotel, Hollywood, Florida |
| Oct. 2-6 | American Academy of Ophthalmology and Otolaryngology, Dallas | Nov. 1-2 | American Association for the Study of Liver Diseases, Hyatt Regency Hotel, Chicago |
| Oct. 5-7 | American Academy of Occupational Medicine, Brown Palace, Denver | Nov. 3-5 | Southern Thoracic Surgical Association, Marco Beach, Marco Island, Florida |
| Oct. 5-8 | American Group Practice Association, Hyatt Regency, Houston | Nov. 5-10 | American Academy of Pediatrics, New York Hilton and Americana Hotel, New York |
| Oct. 6-8 | Central Association of Obstetricians and Gynecologists, Broadwater Beach Hotel, Biloxi, Mississippi | Nov. 6-9 | Southern Medical Association, Fairmont Hotel, Dallas |
| Oct. 7-8 | AMA Hospital Medical Staff Leadership Workshops, Marriott Hotel, Chicago | Nov. 8-10 | American College of Emergency Physicians, Hilton, St. Francis, and Hyatt Union Square Hotels, San Francisco |
| Oct. 7-9 | AMA Regional Meeting, Sawmill Creek, Huron, Ohio | Nov. 9-13 | American Association for Clinical Immunology and Allergy, Fairmont Hotel, New Orleans |
| Oct. 9-14 | Congress of Neurological Surgeons, San Francisco Hilton | Nov. 11-13 | Association of Clinical Scientists, Drake Hotel, Chicago |
| Oct. 10-13 | American Academy of Family Physicians, Las Vegas Hilton | Nov. 11-16 | American Association of Blood Banks, Atlanta Hilton, Atlanta |
| Oct. 12-15 | Southeastern Chapter of Nuclear Medicine, Hyatt House and Benton Convention Center, Winston-Salem, North Carolina | Nov. 28-Dec. 1 | American Heart Association, Fontainebleau Hotel, Miami Beach |
| Oct. 15-19 | American Society of Anesthesiologists, Marriott and Roosevelt, New Orleans | Nov. 29-Dec. 4 | International College of Surgeons (U.S. Section), Fairmont and Roosevelt Hotels, New Orleans |
| Oct. 16-20 | American Medical Tennis Association, Lakeway World of Tennis, Austin, Texas | Nov. 30-Dec. 3 | American Medical Women's Association, Marriott Hotel, Denver |
| Oct. 17-21 | American College of Surgeons, Fairmont Hotel, Dallas | | |
| Oct. 20-28 | American Society of Clinical Pathologists, Convention Center and Hilton Hotel, Las Vegas | | |

STATE

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|------------|---|
| Oct. 3-4 | Tennessee Valley Medical Assembly, Chattanooga Choo Choo Convention and Concert Hall |
| Oct. 21-22 | American College of Physicians—Tennessee Regional Meeting, Hyatt Regency Hotel, Memphis |
| Nov. 2-4 | Tennessee Academy of Family Physicians, River Terrace and Civic Auditorium, Gatlinburg |

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.
Pathology	William H. Hartmann, M.D.

Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1977-78

Aug. 4- Oct. 13	Internal Medicine Intensive Review (each Thursday—33 hours)
Fall, 1977	First Annual John S. Zelenik Lecture
Sept. 29- Oct. 1	William F. Orr Lectureship in Psychiatry
Oct. 17-22	Family Practice Intensive Review (40 hours)
Nov. 1-5	6th Annual Rhamy-Shelley Lectures (16 hours)
Nov. 18-19	Anesthesiology Update 1977 (7 hours)
Dec. 2-3	What's New in Obstetrics for Physicians? (10 hours)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
March 22-24	Clinical Endocrinology (21 hours)
Spring, 1978	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
Spring, 1978	Annual Barney Brooks Lectureship in Surgery (1 hour)

- Spring, 1978 Annual L. W. Edwards Memorial Lecture (1 hour)
- April, 1978 Annual Frank E. Luton Lecture in Psychiatry (1 hour)
- May, 1978 Postgraduate Course in Allergy
- May, 1978 Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)
- May 24-25 17th Annual Seminar in Psychiatry, for Non-Psychiatrists (11 hours)
- July 6-9 Contemporary Clinical Neurology (16 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Knoxville Unit

- Oct. 7 6th Annual Internal Medicine Symposium—Wood Memorial Auditorium (Univ. of Tenn. Memorial Research Center and Hospital), Knoxville. *Credit:* AMA Category 1 and AAFP Prescribed.
- Oct. 16-18 Cancer Concepts 1977—Sheraton Inn, Gatlinburg, TN. *Credit:* 12 hours AMA Category 1.
- Oct. 20-22 Pediatric Orthopedic Conference—Sheraton Hotel, Gatlinburg, TN. *Credit:* 11½ hours AMA Category 1.

For information and/or a brochure contact: Dr. Harvey Goodman, Director of CME, UTCHS, 1923 Alcoa Hwy., Knoxville, TN 37920, Tel. (615) 971-3345.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1977-78

- Oct. 6 Perinatal Course—Cleveland, TN
- Nov. 2-3 The Use of Staplers in Surgery (Workshop)—Chattanooga
- Nov. 10-12 Diagnostic Radiology for Emergency & Family Physicians—Chattanooga
- Nov. 12-13 Ophthalmology Course—Chattanooga
- Dec. 10-11 Basic Clinical Genetics—Las Vegas
- Jan. 17 Prophylactic or Preventive Antibiotic Usage—McMinn-Monroe County Medical Society
- Mar. 2-3 Clinical Orthopedics—Chattanooga
- Mar. 20-23 Diagnostic Radiology for Emergency & Family Physicians—Lake Tahoe, NV

- Mar. 21 Respiratory Infections—McMinn-Monroe County Medical Society
- Apr. 14-15 Pediatric Course—Chattanooga
- Apr. 18 Postsurgical Infections—McMinn-Monroe County Medical Society
- May 4-6 Basic Cardiology—EKGs & Therapy for the Primary Care Physician—Chattanooga
- May 16 Helminthic & Parasitic Infections Requiring Intermediate Hosts—McMinn-Monroe County Medical Society
- June 14-20 OB/GYN Course—Humacao, Puerto Rico

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

TENNESSEE PUBLIC HEALTH ASSOCIATION

- Nov. 15-17 Tennessee Public Health 1877-1977: A Century of Progress, A Challenge for the Future (national conference celebrating the centennial of public health in Tennessee)—Hyatt Regency, Nashville.

For information contact: Anne Stringham, 360 Capitol Hill Bldg., Nashville, TN 37219, Tel. (615) 741-1614.

EAST TENNESSEE CHILDREN'S HOSPITAL

- Nov. 1-2 Pediatric Neurology
- April 18-19 A Day and One Half of Practical Pediatrics
- May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

TENNESSEE ACADEMY OF FAMILY PHYSICIANS

- Nov. 2-4 Annual Meeting—River Terrace & Civic Auditorium, Gatlinburg. *Credit:* up to 30 hours AMA Category 1 and AAFP Prescribed. *Fee:* physicians, \$25; interns and residents, none.

For information contact: Doris Darrow, Tennessee Academy of Family Physicians, 112 Louise Ave., Nashville, TN 37203, Tel. (615) 327-3515.

TENNESSEE CHAPTER AMERICAN COLLEGE OF PHYSICIANS

Oct. 21-22 Tennessee Regional Meeting (Advances in Diagnosis & Treatment/Principles of Prevention)—Hyatt Regency Hotel, Memphis.

For information contact: Blair D. Erb, M.D., Governor for ACP Tennessee Chapter, 616 W. Forest Ave., Jackson, TN 38301, Tel. (901) 424-2345.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

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For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1977-78

Oct. 2-7 Eighth Family Medicine Review (Session I and Session II)—Hyatt Regency, Lexington, KY. *Credit:* 50 hours AMA Category 1 and AAFP. *Fee:* \$295.

Oct. 23-28
Nov. 10-12 Pulmonary Function: New Concepts and Techniques—University of Kentucky, Lexington and VA Hospital. *Credit:* 16 hours AMA Category 1. *Fee:* \$275.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

KENTUCKY DIVISION AMERICAN CANCER SOCIETY

Nov. 4-5 Cancer of the Bladder and Prostate—

Stouffer's Inn, Louisville. *Fee:* None; space limited.

For information contact: George A. Sehlinger, M.D., President, American Cancer Society, Kentucky Division, 2313 Medical Arts Bldg., Louisville, KY 40217.

UNIVERSITY OF MISSISSIPPI SCHOOL OF MEDICINE

Nov. 10-11 Cardiovascular Review Seminar—University of Mississippi Medical Center, Jackson, MS. *Fee:* \$100; registration limited. *Credit:* 17 hours AMA Category 1; AAFP applied for.

For information contact: Continuing Health Professional Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

Nov. 10 13th Annual Louisville Pediatric Society Lectureship—Health Sciences Center Auditorium, Louisville.

Nov. 11-12 11th Annual Newborn Symposium

For information contact: Billy F. Andrews, M.D., Department of Pediatrics, University of Louisville School of Medicine, 200 E. Chestnut St., Louisville, KY 40202.

MEDICAL COLLEGE OF GEORGIA

Oct. 3-7 13th Annual Family Practice Symposium

Oct. 4 Infectious Diseases

Nov. 1 Dermatology and Gynecology

Dec. 6 Diabetes Mellitus

Jan. 3 Cardiology

Feb. 7 Pediatrics

Mar. 7 Metabolic Diseases

Apr. 4 Gastroenterology

May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

See August 1977 issue for listing

OF SPECIAL INTEREST

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Sept. 5-18 Clinical Immunology Update
- The Mechanisms of Immune Competence
 - Immune Deficiency Disorders
 - Autoimmune Diseases
- The telecourse faculty on this three part program is Robert M. Nakamura, M.D., chairman, Department of Pathology, Scripps Clinic Medical Institutions, La Jolla, Cal. and Ernest S. Tucker, M.D., University of California School of Medicine, San Diego.
- Sept. 19- Oct. 2 The Nephrotoxicity of Antibiotics— with Harold C. Neu, M.D., head of Division of Infectious Diseases, Columbia University College of Physicians and Surgeons, New York.
- Antibiotics and Renal Failure—also with Harold C. Neu, M.D.
- The Insulin-Dependent Diabetic Patient: Two Unstable Episodes—with Rubin Bressler, M.D., head of Internal Medicine, University of Arizona College of Medicine, Tucson.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

Oct. 7-8 Southeastern (Ala., Ga., La., Miss.,

S.C.) Regional Meeting—University of Mississippi School of Medicine, Jackson

- Oct. 8 Maryland Regional Meeting—Baltimore
- Oct. 14-15 Florida Regional Meeting—Colonny Beach Club, Long Boat Key, Sarasota
- Oct. 14-15 Kentucky Regional Meeting—Stouffer's Louisville Inn, Louisville
- Oct. 14-15 Puerto Rico Regional Meeting—Ponce, P.R.
- Oct. 21-22 Tennessee Regional Meeting—Regency-Hyatt Hotel, Memphis
- Oct. 25 Indiana Regional Meeting—Indianapolis
- Oct. 28-29 Arkansas Regional Meeting—University of Arkansas Medical Center, Little Rock
- Nov. 18-19 Georgia Regional Meeting, Atlanta
- Dec. 1-3 Texas (Northern) Regional Meeting—Fairmont Hotel, Dallas
- Dec. 3 North Carolina Regional Meeting—University of N. Carolina School of Medicine, Chapel Hill
- Feb. 11 Virginia Regional Meeting—The Homestead, Hot Springs
- Mar. 10-12 South Carolina Regional Meeting—Sheraton Myrtle Beach Inn, Myrtle Beach
- May 5-6 Alabama Regional Meeting, Grand Hotel, Point Clear

Postgraduate Courses

- Nov. 14-18 Renal Disease: Pathophysiology and Treatment—New York
- Dec. 5-8 Controversies in Gastroenterology—Philadelphia
- Dec. 5-9 Advances in Diagnosis and Treatment in Clinical Medicine—Los Angeles
- Dec. 5-9 Fluid and Electrolyte Balance, Hypertension and Renal Disease—Chicago
- Jan. 9-13 Contemporary Internal Medicine—New York
- Jan. 9-13 Workshops in the Pathophysiology, Diagnosis and Treatment of Electrolyte and Acid-Base Disorders—Philadelphia
- Jan. 18-20 Problems in Clinical Endocrinology—Seattle
- Jan. 24-27 Present Concepts in Internal Medicine—San Francisco
- Feb. 27- Mar. 3 4th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley—Sun Valley, Idaho
- Feb. 28- Mar. 2 Clinical Oncology for the General Internist—Denver
- Mar. 1-3 Practical Management of Pulmonary Diseases—Temple, Tex.
- Mar. 6-8 Diagnosis, Treatment and Prevention of Genetic Disease—Palm Springs, Cal.

- Mar. 6-8 Recent Advances in Neuro-Endocrinology—Montreal
- Mar. 20-22 Recent Advances in Internal Medicine—Galveston, Tex.
- Mar. 20-24 Current Concepts in Renal Disease and Electrolyte Disorders—New Haven, Conn.
- Mar. 22-24 Clinical Endocrinology—Nashville, Tenn.
- Mar. 23-25 Clinical Recognition and Management of Heart Disease—Tucson, Ariz.
- Mar. 29-31 Diagnostic and Therapeutic Advances in Gastroenterology—Rochester, Minn.
- Apr. 3-5 Current Concepts in Clinical Oncology—Albany, N.Y.
- Apr. 5-7 Current Concepts in Clinical Infectious Diseases—Charlottesville, Va.
- Apr. 12-14 Laboratory Medicine—Rochester, Minn.
- Apr. 26-28 Applied Immunology: The Rheumatic Diseases, Birmingham, Ala.
- Apr. 27-29 Three Days of Hepatobiliary Diseases—Atlanta
- May 8-12 Advances in Clinical Medicine—New Haven, Conn.
- May 8-12 Recent Progress in Clinical Endocrinology: Physiological Approach to Diagnosis and Treatment—Ann Arbor, Mich.
- May 10-12 Clinical Auscultation of the Heart—Washington, D.C.
- May 10-12 Nuclear Medicine for the Internist—Rochester, Minn.
- May 15-19 Rheumatic Diseases: Clinical Aspects and Basic Mechanisms—Boston
- May 22-24 Multidisciplinary Management of Solid Tumors—Rochester, Minn.
- May 22-24 Hematology Update 1978—Rochester, Minn.
- May 22-26 Review of the Old and New in the Diagnosis and Therapy of Infectious Diseases, New Orleans
- May 31-June 3 Clinical Cardiology—Update 1978—Vancouver, B.C.
- May 31-June 3 Neurology for Internists and Family Physicians—Winston-Salem, N.C.
- June 5-9 Internal Medicine: Recent Advances in Diagnosis and Treatment—Cincinnati
- June 14-17 Critical Care Medicine 1978—Banff, Alberta
- June 23-26 Infectious Diseases—Winnipeg, Manitoba
- July 10-12 Topics in Clinical Hematology V: Disorders of Proliferation and Maturation—Waterville, Me.
- July 13-15 Topics in Clinical Oncology V: Multidisciplinary Approaches to Difficult Cancer Problems—Waterville, Me.

DUKE UNIVERSITY MEDICAL SCHOOL

- Oct. 24-28 Radiology Postgraduate Course—Southampton Princess Hotel, Bermuda.
Credit: 25 hours AMA Category 1.

For information contact: Robert McLelland, M.D., Radiology-Box 3808, Duke University Medical Center, Durham, NC 27710, Tel. (919) 684-4397.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

- Oct. 31-Nov. 5 Laryngology and Bronchoesophagology—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact: Department of Otolaryngology, Eye and Ear Infirmary, 1855 W. Taylor St., Chicago, IL 60612.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION

Interstate Scientific Assembly

- Oct. 31-Nov. 3 62nd Annual International Scientific Assembly of Interstate Postgraduate Medical Association—Diplomat Hotel, Hollywood, FL. In cooperation with the Fla. Acad. of Family Physicians, the Univ. of Miami, and the Univ. of Fla.-Gainesville. *Credit:* 26 hours AAFP and AMA. *Fee:* \$75 in advance; \$100 at the meeting.

For information contact: Alton Ochsner, M.D., Program Chairman, Interstate Postgraduate Medical Association, P.O. Box 1109, Madison, WS 53701.

AMERICAN COLLEGE OF CHEST PHYSICIANS

- Oct. 30-Nov. 3 43rd Annual Scientific Assembly (Cardiopulmonary Medicine and Surgery: Current Perspectives and Future Frontiers)—MGM Grand Hotel, Las Vegas.
- Oct. 30 Management of a Respiratory Therapy Service (postgraduate course held in conjunction with ACCP Scientific Assembly)
- Oct. 31 Cardiopulmonary Technology Today (postgraduate course held in conjunction with ACCP Scientific Assembly)

Nov. 28-30 Clearing the Respiratory Tract—Physiopathology and Therapeutics — New York Sheraton, New York. *Credit:* 20 hours AMA Category 1. *Fee:* ACCP members, \$165; non-member physicians, \$185; residents, nurses, therapists, \$145.

For information contact: Dale E. Braddy, MS, Director of Education, ACCP, 911 Busse Hwy., Park Ridge, IL 60068.

**BETH ISRAEL HOSPITAL
DENVER, COLORADO**

See August 1977 issue for listing

NOTICE TO SUBSCRIBERS

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Request for Hemophiliac Study Referrals

In a coordinated effort with the National Hemophilia Foundation, the Cumberland Chapter of the NHF is developing a comprehensive registry of persons suffering from hemophilia and Von Willebrand's disease in Tennessee. The need for such a registry is vital in the assaying of present and future blood needs as well as in procuring and administering government and Foundation aid to hemophiliacs.

Physicians, nurses, and all other health care professionals are asked to have any hemophilic or bleeding disorder patients who have not done so previously contact the State Hemophilia Program, c/o Mr. Ralph Maxwell, Ben Allen Rd., Nashville, TN 37216; tel. (615) 741-7206 or the Cumberland Chapter of the National Hemophilia Foundation, One Maryland Farms, Brentwood, TN 37027; tel. (615) 373-0400. The State Program is a relatively new one (established in 1973), and those who have not solicited its services may be eligible for free treatment. Those who do not need such assistance are nevertheless urged to contact us for the purpose of this project.

All information gathered will be kept in strictest confidence and will be released under no circumstance (except in the form of aggregate statistics) without prior consent of the patient or patient's family.

Risks of Breast Cancer Weighed for Patients

In one of every 15 women, breast cancer will develop, says Theodore C. Bernstein, M.D., a cancer specialist of the Scripps Clinic and Research Foundation, La Jolla, Calif., in the July 25 issue of *JAMA*. Women with an early menarche and those with menopause at 50 years and older have about one and one half times greater risk than those having natural menopause under the age of 45 years. Removal of the ovaries in a woman aged 40 years or less decreases the risk about 50%.

Risk is tripled when first pregnancy occurs after the mother is 35 years of age. Women who have never married are at increased risk. Women who are fat have increased risk.

Birth control pills and hormones given after menopause have been implicated in cancer, but the relationship is not established. However, there is enough of an association to suggest that estrogens should not be used by high-risk patients.

Prior cancer of the uterus, ovary or colon increases risk of breast cancer. The most common premalignant lesion is cancer of the opposite breast. One in ten of those having cancer in one breast will develop cancer in the other.

Risk of breast cancer varies geographically. In Japan women have a much lower rate than in America. When Japanese women migrate to America, the incidence increases after several generations. Exposure to irradiation by mammograph "probably increases the risk, especially in premenopausal women."

Heredity plays a major role in breast cancer risk. Children of women having bilateral breast cancer may have a 50% chance of having the disease. Period of highest risk in women is between the ages of 20 and 40 years. But in women with no heredity risk, the probability of breast cancer development rises with advancing age.

"Indeed, age is probably the most important factor influencing the development of breast carcinoma," Dr. Bernstein says. "In advising women about their chances of getting breast cancer, a physician should not lean too heavily on the statistics of risk. One cannot make predictions about a person based on statistics. It is wise to advise every woman to pay close attention. 'Examine yourself each time you bathe and report to me without delay any irregularity you encounter.'"

Laetrile Overdose Causes Cyanide Poisoning

Those who insist on using laetrile as a treatment for cancer are advised to keep the tablets in child-proof containers and to have a cyanide resuscitation kit quickly available. Such a kit is on the market.

Laetrile, or amygdalin, is an extract of apricot pits used to treat cancer. Most medical authorities have declared it valueless. And now it is also known to be dangerous.

Death of an 11-year-old girl from accidentally swallowing laetrile tablets is reported in the Aug. 8 issue of *JAMA*. It had been reported earlier this year in the lay press.

A trio of Buffalo, N. Y. physicians report that the child swallowed from one to five tablets of the product. It belonged to her father, who has cancer. The tablets were thought to be harmless by the parents and were contained in a vial along with an assortment of vitamin tablets, the doctors say.

The child became listless within half an hour after swallowing the tablets, and vomited. When breathing became difficult and the child began to lose consciousness, the mother rushed her to a hospital, extensive and heroic treatment measures were instituted, but the child died after 72 hours.

Death was from cyanide poisoning. Laetrile is made from the pits of apricots, which contain cyanide.

Due to the increased interest and changing legislation, amygdalin (laetrile) is becoming more available in this country. Its use is controversial, its potential toxic effects are not well known, and many users consider it harmless. This tragic case emphasizes the potentially fatal effect of this drug in young children.



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Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

SUSTAINED ACTION



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What's Your Tolerance?

MARK R. JOHNSON, M.D.

When you've had enough, quit. Decide now how much bureaucratic interference and governmental subordination you will tolerate and, when the interference and subordination surpass your limits of tolerance, quit practicing medicine. Don't go on strike. Don't suffer or publicize your indignation. Don't rage or make loud noises. Just quit.

If you are one blessed with unlimited tolerance for subjugation and manipulation, you should be making plans to see more patients in less time with fewer assistants and for lower fees. You should plan to dispense with vacations and spend more time in continuing education activities. In addition, you will need to prepare for a number of periodic competency tests. Judges, legislators and other politicians as well as a variety of laymen will exercise an increasing authority over your practice but none of them will share your responsibilities or mitigate your liability. In short, you will be told how you must establish a diagnosis, how you treat an illness, which drugs you can use and which drugs you cannot use and how much you can charge—not for your time or your education or your skill or your capital investment or your assumption of liability—but for the treatment of a specific illness.

Whether or not you have limits of tolerance, if you believe such levels of subordination are too extreme, exaggerated or remote, you are naive or stuporous. Every one of the restrictions described has already been enacted and you are tolerating them. Their impact has, however, by deliberate political design, been retarded

so as not to generate resistance. Avoiding the invidious is the very essence of seduction; the hallmark of the demagogue.

So now we have but one decision left to make. How much subordination will we, as physicians, as members of an honorable profession, as free citizens in a supposedly free society, tolerate? Each of us must make this decision and make it now. Already, it is late.

Already insurance companies are asking what is meant by the term "Professional Services." Already the secretary of Health, Education and Welfare has slandered many of our colleagues by publicizing inaccurate information about their incomes. Already some anonymous voice from the President's cluster of confidants has whispered a proposal to place a limitation on our fees.

If you find the limits of your tolerance in any of these prevailing or predictable indignities it is time to tell your patients. They deserve to know because it is only they who might forestall the impending disaster of medical care by fiat or, perhaps, no medical care at all. So tell them, once you have decided which indignity is more than you can honorably tolerate, when you are going to quit.

Maybe, by the slimmest of chances, if your patients knew for a fact that you would quit practicing medicine the very day that, for example, your fees are limited by law or by decree, our lawmakers might hear something besides the murmuring of the polluted Potomac. And maybe, once they hear from our patients, we might win a battle if not the war.

Naturally, if such a campaign should fail, you will be forced to find another job. And here, a word of advice: Next time, join a *real* union and work as a genuine professional. You'll be glad you did.

Reproduced with permission of the Oklahoma State Medical Association from the *Oklahoma State Medical Association Journal*, May, 1977.

MOBILE X-RAY FACILITY FOR SALE OR LEASE

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Reply with curriculum vitae to Box C-1, TMA Journal, 112 Louise Avenue, Nashville, Tennessee 37203.

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Immediate opening for full-time emergency physician to work daytime, Monday through Friday. Attractive salary plus opportunity for additional income. Modern, progressive, fully accredited medical center in Alabama. Congenial, family atmosphere, excellent schools. Recreational opportunities abound.

Reply with curriculum vitae to Box C-2, TMA Journal, 112 Louise Avenue, Nashville, Tennessee 37203.

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Psychiatrist for community mental health center using case manager model. Start \$41,600. Board eligible. Private practice allowable. 32 hours per week. Liberal benefits. Moving expenses. Open October 1, 1977. Send resume and three reference letters to Personnel, Scioto-Point Valley Mental Health Center, 50 Pohlman Road, Chillicothe, Ohio 45601, phone (614) 775-1260.

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PHYSICIANS NEEDED

Full- and part-time medical consultants are needed by an agency in Nashville to assist in the evaluation of Social Security disability claims. Physicians with specialty or general practice backgrounds, who are licensed in Tennessee, are being recruited to review medical evidence and consult with disability examiners. Contact Disability Services at (615) 741-7686.

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Coronary Artery Disease

Current Concepts of Evaluation and Management:

A Symposium

Indications for Coronary Arteriography

CHARLES E. MAYES, M.D.

"Coronary arteriography is indicated when a problem is encountered which may be resolved by the objective demonstration of the coronary artery tree, provided competent personnel and medical facilities are available and the potential risks are acceptable to the patient and his physician."¹ This statement regarding his indications for coronary arteriography was published by Dr. F. Mason Sones, one of the pioneers in the development of this procedure, in 1962. As a general guideline, this statement is as helpful today as it was in 1962.

More specifically, who should have a coronary arteriogram in 1977? In what situations is coronary arteriography helpful? How does one decide which patients should have coronary arteriography?

One of the primary reasons for performing coronary arteriography is to determine if coronary occlusive disease is present or not. Another is to define coronary anatomy to determine if coronary bypass surgery is possible and indicated in the patient being evaluated. During the past few years, there has been a great change in the evaluation and treatment of patients with coronary artery disease. Because there are still many

unresolved questions in this field, there is considerable difference of opinion regarding the proper treatment of various coronary lesions.

There are certain situations in which coronary arteriography seems to be clearly indicated. These are unstable angina pectoris; angina pectoris that cannot be satisfactorily controlled with good medical treatment; and, in selected patients, anticipated aortic or mitral valve surgery.

Patients with unstable angina usually have recurrent, prolonged and severe episodes of pain, often unrelated to exertion. In order for the syndrome to be called unstable angina, there should be no obvious precipitating factors such as anemia or arrhythmias and the cardiac enzymes should not be significantly elevated.^{2,3} Coronary arteriography to specifically define the coronary anatomy is very helpful in the treatment of patients with this syndrome. It is our feeling that the procedure need not be performed on an emergency basis, but should be performed as soon as the patient's condition can be stabilized by intensive treatment in the coronary care unit with rest, vasodilators, oxygen, sedation, analgesics and beta blockade (propranolol).

Coronary arteriography is particularly important and helpful in patients with unstable angina because of the severity of their symptoms and their generally poor prognosis. As many as 10% or more of these patients will have significant obstruction in the left main coronary artery. Pa-

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CORONARY ARTERIOGRAPHY/Mayes

tients who have unstable angina and significant obstructions in the left main coronary artery should be treated with aortocoronary bypass surgery as soon as possible.^{4,5,6}

There is still disagreement about the best treatment for unstable angina which is not due to a lesion of the left main coronary artery. It is our opinion that most of these patients should be treated surgically if their coronary anatomy and general condition make them acceptable candidates for coronary bypass surgery.⁷

Patients with angina pectoris that cannot be satisfactorily controlled with good medical therapy should have coronary arteriography performed unless there is some strong contraindication to coronary bypass surgery. If surgically treatable disease (significant proximal lesions with relatively good distal vessels) is present, these patients should have aortocoronary bypass surgery. This operation has been performed successfully and with good results in patients in their 70s and even 80s who were severely symptomatic and incapacitated by pain.

Coronary arteriography is often quite helpful in patients who are about to undergo surgery for mitral or aortic valve disease. This is especially true if these patients have a history of chest pain suggestive of angina. Certainly not everyone who has aortic or mitral valve surgery should have coronary arteriography; however, knowing the coronary anatomy is quite helpful to the surgeon in selected patients.

There are other situations in which there is much more disagreement about who should and who should not have coronary arteriography. Some of these are patients who have recovered from an acute myocardial infarction; patients with undiagnosed chest pain; patients with stable angina pectoris; asymptomatic patients with a positive treadmill stress test; and patients who have previously had coronary bypass surgery.

If a patient continues to have angina pectoris following a myocardial infarction, it is our feeling that he should have coronary arteriography.

Should a patient who has recovered from a myocardial infarction and is asymptomatic have coronary arteriography? There is no general agreement about this. At the present time, it is our opinion that the procedure should be done in those patients who are relatively young (either chronologically or physiologically) and who have

had a myocardial infarction. We have often been surprised to find total occlusion in one vessel, which caused the myocardial infarction, plus severe narrowing in another major artery (such as total occlusion of the right coronary and severe narrowing of the left anterior descending coronary). This seems to us to be important information to have.

Coronary arteriography is often necessary in patients who have chest pain for which no cause has been found after thorough evaluation by non-invasive means. This is particularly true for patients who are involved in occupations in which the safety of others is often dependent upon their state of health, such as pilots, truck or bus drivers, etc. It is often very important to the patient and to others to know whether or not significant coronary disease is present.

Not all patients who have stable angina pectoris should have coronary arteriography; but on the other hand some of them certainly should be studied. Some who should have the procedure are younger patients; patients with strikingly positive treadmill stress tests; and patients who are unable to adjust to having recurrent episodes of exertional pain (which, not surprisingly, comprises a rather large percentage of patients with angina).^{8,9,10}

What does one do with an asymptomatic patient who has a positive treadmill stress test? Obviously, there is no standard answer to this question. The decision about what to do must be individualized. Some of these patients, though certainly not all, should have coronary arteriography. The decision as to who should and who should not be studied in this situation must be made on the basis of the degree of positivity of the test, the patient's age, the patient's occupation, and the emotional impact on the patient of knowing he has a positive stress test. A discussion of whether a treadmill test should be done on asymptomatic people is beyond the scope of this paper.

We use essentially the same criteria for deciding whether or when to perform coronary arteriography on patients who have had previous aortocoronary bypass surgery that we use in patients who have not had surgery. If there is a good reason to perform the procedure on these patients, we do it. However, curiosity as to whether or not the grafts are patent is not an acceptable indication to perform the procedure.

It has been demonstrated in several studies that prognosis for life is closely related to the

severity of the coronary lesions and to the state of left ventricular function.¹¹ We feel that coronary arteriography is rarely, if ever, indicated to gain prognostic information alone. However, this information is often quite important and useful when the procedure is performed for other reasons.

There are some contraindications for coronary arteriography. The major ones are severe associated disease, extreme obesity, inadequate equipment and, perhaps most importantly, an inexperienced coronary angiographer.¹²

In good hands this procedure is often quite helpful and can be done with minimal discomfort to the patient and with a very low incidence of morbidity and mortality.

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The Surgical Therapy of Coronary Artery Disease—An Analysis of the First 750 Cases at Baptist Hospital

JACKSON HARRIS, M.D., and ROBERT A. HARDIN, M.D.

Patient Selection

The majority of patients selected for operation have intractable angina pectoris or life-threatening coronary artery obstructions, defined as greater than 70% in a major vessel. In addition the distal portion of the vessel must be suitable for bypass, i.e., the run-off must be good. Ventricular function, as measured by the ejection fraction and the end diastolic pressure, and as viewed in the ventriculogram, is an important but not limiting determination. Generally, patients with good ventricular function are considered to be better candidates.

Renal disease and diabetes are not contraindications to coronary artery bypass, but do require careful patient management. Internal carotid artery obstruction is occasionally encountered and may require concomitant endarterectomy. Aortic

atherosclerosis, although frequently mentioned by other authors, has not proved to be a problem in finding the site for the origin of the vein grafts. When the autologous saphenous vein is not available for the graft, as in occasional patients who have had bilateral saphenous strippings, we prefer to use an homologous saphenous vein.

Preoperative Management

This includes a basic psychological indoctrination by the physician and both the operating room and primary care nurses, who give the patient a chronological step-by-step view of what the daily procedures will be. Pulmonary toilet is considered mandatory. This is carried out by the Physical Therapy Department, who teach patients breathing and coughing exercises and perform cupping therapy as well. Many of these patients are cigarette smokers and all are required to stop smoking. In passing, it should be mentioned that

From the Department of Surgery, Baptist Hospital, Nashville, TN 37236.

we no longer use intermittent positive pressure breathing, preoperatively or postoperatively. Medications such as antihypertensives, anticoagulants, and propranolol (Inderal) are gradually decreased prior to the operation. The night before operation an intravenous solution of glucose and potassium is given to all patients over a ten-hour period.

Conduct of the Operation

Placement of arterial and right atrial monitoring lines precedes the induction of anesthesia. This has been of benefit to all patients but particularly to those with left main coronary artery lesions, who may develop severe hypotension and/or infarction during anesthesia induction. A Bently Bubble Oxygenator is used with moderate hypothermia at 30 C to 31 C. Hemodilution and a flow of 2.2 L/min is utilized. A Morris aortic cannula and a modified atrial cannula without ventricular venting has been standard.

The aorta is cross clamped 8 to 15 minutes for each distal anastomosis. The average pump time for a single bypass is 32 minutes, for a double bypass 64 minutes, and for triple or more bypasses 88 minutes. Blood transfusions during and after operation have gradually decreased in amount and for the last six months have averaged less than 3 units per patient.

Normal coronary artery anatomy is shown schematically in Figure 1. Technically, bypass grafting can be done in several ways.

Separate bypasses to each obstructed artery can be constructed as shown in Figure 2.

Bridge, or sequential grafting, as shown in Figure 3 is often done to bypass two blocks in the same artery.

The Sewell, or "snake" graft, with a single aortic anastomosis and several side-to-side anastomoses to various blocked arteries, ending finally with an end-to-side anastomosis to the last obstructed coronary artery, is shown in Figure 4.

Postoperative Management

Mechanical ventilation is necessary for the first 18 hours. With nasotracheal intubation, patients are comfortable on the ventilator, allowing better control of blood gases. Blood gases, potassium, hematocrit and serum creatinine are determined approximately every four hours. Pulmonary exercises are started within 18 hours after operation.

Postoperative Morbidity

Prevention of postmortem morbidity (Table 1) requires constant patient attention:

Cardiac tamponade requiring reoperation has occurred in 2.8% of our patients. There has been no associated mortality. Tamponade has occurred less frequently in the past two years since we have reduced the amount of protamine for heparin neutralization.

Myocardial infarction in the early postoperative course has been infrequent.

Supraventricular arrhythmias are more common than ventricular arrhythmias but both generally respond to appropriate drug therapy.

Shivering occasionally occurs in the postoperative period, and because of accompanying poor tissue oxygen perfusion is treated with intravenous muscle relaxants.

Hypotension treatment is dependent on its cause, whether it be hypovolemia or poor ventricular function.

Hypertension with an arterial mean in excess of 100 mm Hg is occasionally seen and is treated with intravenous infusions of sodium nitropruside.

Hypokalemia is frequently seen and is treated with additional infusions of potassium chloride.

Serum creatinine is monitored along with the potassium and should it be in excess of 2 mg/dl, potassium is withdrawn from intravenous fluids.

Late Complications

After the patient has returned home (Table 2) *lymph seromas* of the thigh may occur and will

TABLE 1
EARLY POSTOPERATIVE MORBIDITY

Tamponade
Arrhythmia
Supraventricular
Ventricular
Shivering
Hypotension
Hypertension
Hypokalemia
Hyperkalemia
Myocardial Infarct

TABLE 2
LATE POSTOPERATIVE MORBIDITY

Thigh Seroma
Sternal Separation
Postcardiotomy Syndrome
Pulmonary Embolus
Myocardial Infarct
Complications of
Anticoagulant Therapy

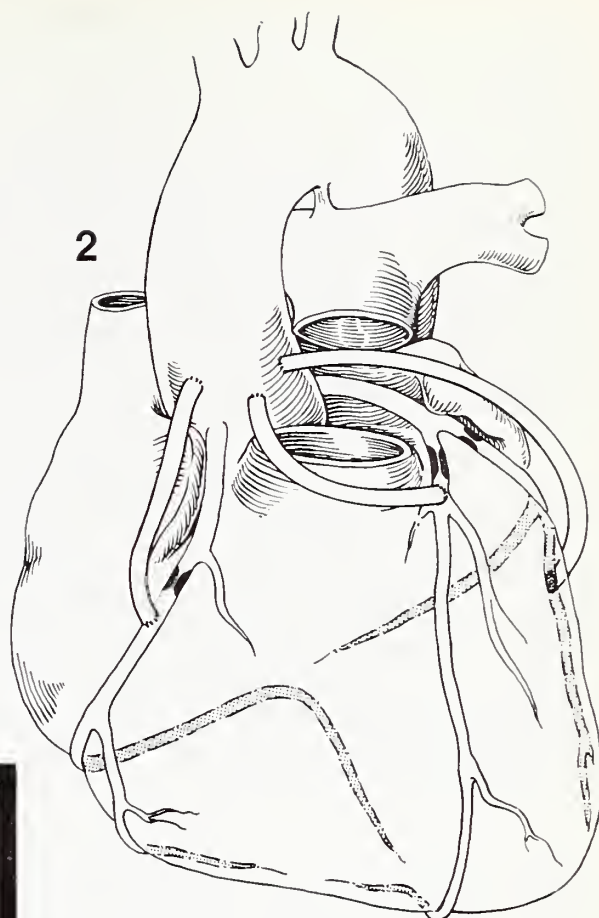
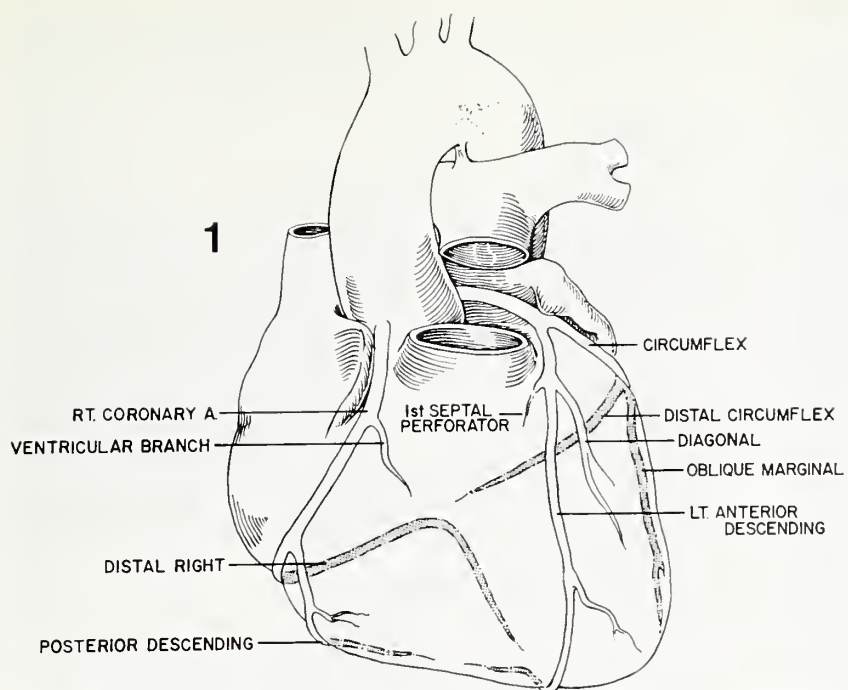
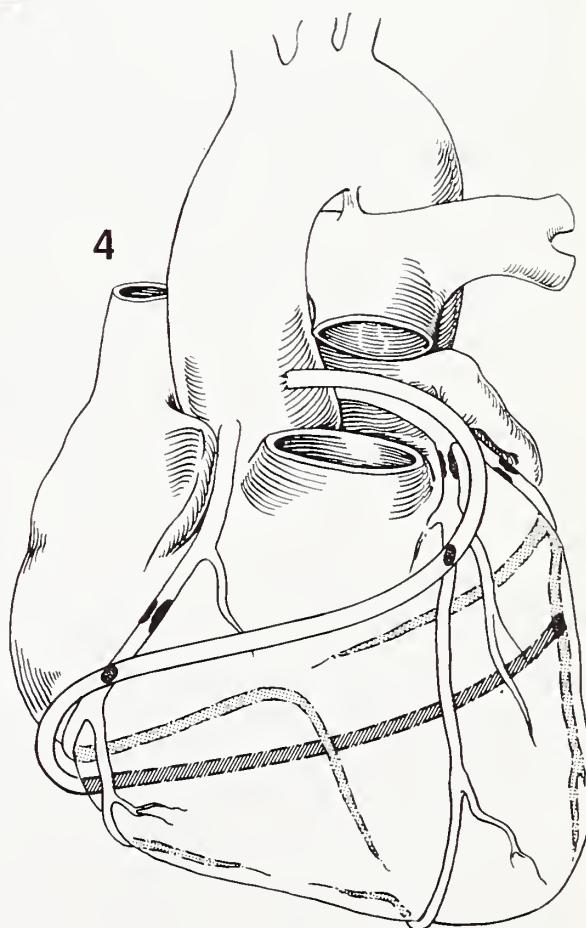
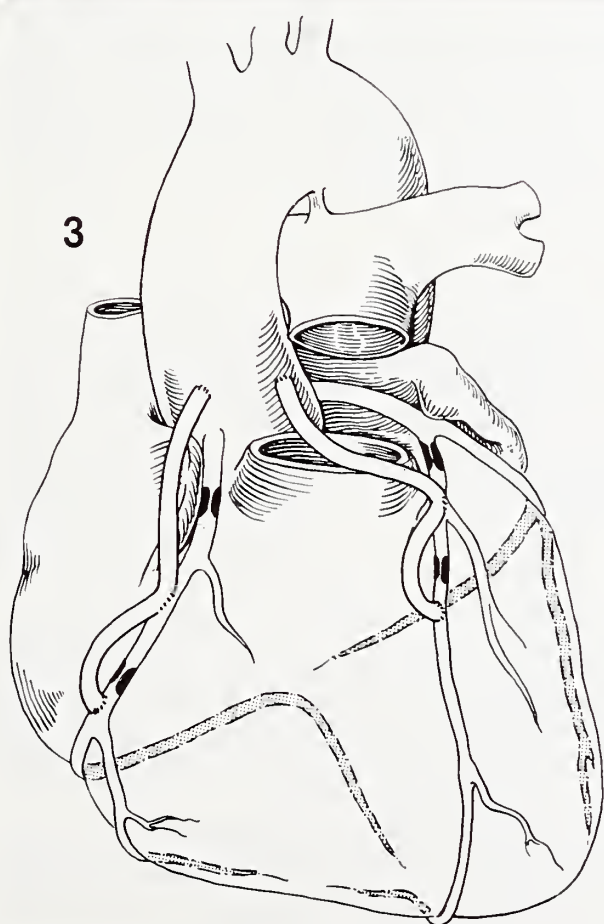


Figure 1. Anatomy

Figure 2. Individual Bypass

Figure 3. Sequential (Bridge) Bypass

Figure 4. Snake (Sewell)



generally absorb. *Sternal separation* requiring repair has occurred in .93% of patients.

Postcardiotomy syndrome has occurred in 2% of patients, occasionally while they are still in the hospital. These patients respond well to steroid therapy and because of the potential danger of the grafts, steroid therapy should be continued about two months.

Pulmonary embolus has been a very rare complication and no patient has died from it.

Myocardial infarction requiring rehospitalization has occurred in 1.2% of our patients. Likewise, a small number of patients have been returned to the hospital for complications of anticoagulation therapy. Though we do not anticoagulate patients postoperatively, some internists routinely place their patients on warfarin (Coumadin).

Other Postoperative Considerations

We encourage our patients to walk up to two miles daily and to return to work when they desire, consistent with the physical demands of their job. In most instances the sternum is completely healed in eight weeks, but many patients return to work in three or four weeks. Return to sexual activity is restricted only by the patient's discomfort relative to his median sternotomy. Smoking is prohibited, and it is suggested that patients maintain a weight consistent with their height. Strict dietary regimens are ordinarily avoided because they are difficult for patients to

follow, but patients are educated in the potential benefits of avoidance of animal fats.

Mortality

The hospital mortality and the late mortality are shown in Tables 3 and 4. The overall hospital mortality has been less than 1%; likewise, the late mortality has been less than 1% per year. The late deaths include some patients known not to have died of heart disease, i.e., leukemia and stroke. Sixteen patients (2.1% of the total) have been reoperated upon, either for failure of grafts to take or for progression of disease involving other vessels. There has been no early or late mortality in this group.

TABLE 3
OPERATIVE (HOSPITAL) MORTALITY

	Cases	Deaths	%
Single Bypass	172	0	0
Double Bypass	451	3	0.67
Triple (or more) Bypass	127	4	3.2
TOTAL	750	7	0.94

TABLE 4
LATE MORTALITY (AFTER HOSPITAL DISCHARGE)

	Total	% Per Year
Single Bypass	2	0.2
Double Bypass	17	0.95
Triple (or more) Bypass	2	0.4
TOTAL	21	0.7

Summary

Preoperative, operative and postoperative management of patients undergoing coronary artery bypass has been reviewed. Operative and late mortality figures are given.

Congestive Heart Failure — A Diagnostic Approach

TAYLOR M. WRAY, M.D.

The diagnosis of congestive heart failure carries a very serious prognosis. Data from the Framingham Study suggested that the probability of dying within five years from the onset of congestive heart failure (CHF) was between 40% and 60%.¹ From these mortality figures it is clear

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that the diagnosis of CHF should be based on solid evidence. Additionally, once the diagnosis of CHF is made an etiology must be established, if possible, since appropriate treatment frequently depends on the etiology.

Many of the symptoms of heart failure (dyspnea, orthopnea, cough, edema) may be caused by other disease processes unrelated to the heart.

Some of the common conditions which may be confused with heart failure because of similar symptoms, physical findings, radiographic abnormalities, or all of these, are listed in Table 1.

TABLE 1
COMMON CONDITIONS WHICH MAY BE CONFUSED
WITH CONGESTIVE HEART FAILURE

Chronic Pulmonary Disease
(Emphysema, asthma, etc.)
Acute Pulmonary Disease
(Pulmonary infarction, pneumonia, etc.)
Edematous States
(Cirrhosis, nephrotic syndrome, etc.)
Chronic Venous Insufficiency

TABLE 2
NONINVASIVE ASSESSMENT OF HEART FAILURE

Physical Examination
Chest X-ray
Cardiac Fluoroscopy
Electrocardiogram (EKG)
Echocardiogram

There are several important noninvasive techniques which are useful in evaluating the patient with suspected or documented heart failure (Table 2). The first and most important of these is the *physical examination* of the patient. Particular attention should be given to the precordium. An enlarged, sustained and laterally displaced cardiac apical impulse is firm evidence of an abnormal left ventricle. Likewise a parasternal lift suggests an enlarged right ventricle. The presence of a third heart sound (S3 gallop) in an adult, especially over the age of 40, is pathological and is a cardinal sign of left ventricular failure. A fourth heart sound (presystolic or S4 gallop) is not in itself a sign of heart failure but usually reflects a decrease in ventricular compliance associated with ischemic heart disease or systemic hypertension.² The presence of a heart murmur should raise the possibility of valvular or congenital heart disease. Elevation of the jugular venous pressure, hepatomegaly, ascites, and peripheral edema are all signs of right ventricular failure (although left ventricular failure may coexist). Examination of the carotid or femoral pulses may reveal characteristic abnormalities in such conditions as aortic stenosis, aortic insufficiency, severe left ventricular failure (pulses alternans) or cardiac tamponade (pulses paradoxus).

A second technique used in the evaluation of the patient with suspected or documented heart failure is the *chest x-ray*. The absence of cardio-

megaly is extremely rare in cases of decompensated left ventricular failure. In other words, the diagnosis of left ventricular failure should be questioned if the cardiac silhouette is normal on the upright chest x-ray. Enlargement of the right ventricle or left atrium is best seen on the lateral chest x-ray. Radiographic findings in pulmonary edema may be confused with other infiltrative processes such as pneumonia or neoplasm in certain instances. Interestingly, pleural effusions limited to the left side of the chest are seldom due to heart failure.²

Cardiac fluoroscopy is a useful adjunct to the plain chest x-ray. Calcification of the coronary arteries, cardiac valves, or pericardium is best seen with fluoroscopy and may give an important clue to the etiology of heart failure.

The *electrocardiogram (EKG)* may be normal in congestive heart failure, though certain EKG abnormalities are very helpful in suggesting an etiology for heart failure. Examples of such abnormalities would include left ventricular hypertrophy (hypertensive heart disease or aortic stenosis), extremely low voltage (cardiomyopathy or pericardial effusion), left atrial enlargement associated with right axis deviation or right ventricular hypertrophy (mitral stenosis) and, of course, EKG evidence of prior myocardial infarction.

Echocardiography is a relatively new technique which has proved invaluable in the assessment of a patient with congestive heart failure.³ It is completely safe and painless and in many situations may eliminate the need for cardiac catheterization. Echocardiography provides an accurate measurement of cardiac chamber size, ventricular wall thickness and wall motion, and valve motion and structure. This technique is also highly sensitive in detecting the presence or absence of pericardial effusion.

The most common causes of heart failure are listed in Table 3. The echocardiographic findings in each of these causes of heart failure are summarized:

Hypertension: The essential echocardiographic finding in hypertensive heart disease is thickening

TABLE 3
MAJOR ETIOLOGIES OF CONGESTIVE HEART FAILURE

Hypertension
Coronary Atherosclerosis
Valvular Heart Disease
Congenital
"Primary" Myocardial Disease (Cardiomyopathy)
Pericardial Disease

CONGESTIVE HEART FAILURE/Wray

(hypertrophy) of the interventricular septum and posterior left ventricular wall. As overt heart failure occurs there is usually progressive dilatation of the left ventricular chamber.

Coronary Atherosclerosis: Heart failure due to coronary atherosclerosis is almost invariably associated with one or more prior myocardial infarctions. This may be seen echocardiographically as decreased or paradoxical motion of one wall of the left ventricle while motion of the uninvolved wall may be exaggerated.

Valvular Heart Disease: All the cardiac valves may be seen echocardiographically, although the mitral and aortic valves are seen more easily than the tricuspid and pulmonic valves. The echocardiographic features of mitral stenosis, torn mitral valve chordae, aortic stenosis and valvular vegetations are very characteristic. Additionally, the effect of specific valvular abnormality on cardiac chamber size and ventricular function may also be assessed by this technique.

Congenital Heart Disease: Since most of the intracardiac structures can be seen with echocardiography, it is evident that this technique is very useful in a variety of types of congenital heart disease such as tetralogy of Fallot, atrial septal defect, Ebstein's anomaly, pulmonic stenosis, and many others. In atrial septal defect, a relatively common finding in adults with heart disease, the echocardiogram does not demonstrate the actual defect in the interatrial septum, but does show the consequences of increased blood flow to the right ventricle. This is seen echocardiographically as right ventricular dilatation and paradoxical septal motion.

"Primary" Myocardial Disease: The basic cause of myocardial dysfunction in many of these conditions is unknown. The congestive cardiomyopathies (e.g., alcoholic cardiomyopathy) have characteristic echocardiographic features. These include dilatation of both ventricles, normal wall thickness, and very poor motion of the septum and posterior left ventricular wall. The hypertrophic cardiomyopathies have marked hypertrophy (thickening) of the left ventricular walls. A special type of hypertrophic cardiomyopathy is hypertrophic subaortic stenosis (IHSS). This disorder has very distinctive echocardiographic features which include marked septal hypertrophy out of proportion to that of the posterior left ventricular wall, decreased septal motion and an

abnormal anterior movement of the anterior mitral leaflet in systole.

Pericardial Disease: Cardiac tamponade and constrictive pericarditis can cause marked impairment of normal cardiac function. Echocardiography is highly sensitive in detecting small amounts of pericardial fluid (certainly 50 cc or less) and can provide a reasonable estimate of the volume of larger effusions. The effusion appears as an echo-free space posterior (and sometimes anterior) to the left ventricular wall. Pericardial thickening can also occasionally be detected with echocardiography.

Summary

The diagnosis of congestive heart failure carries serious prognostic and therapeutic implications. It may be confused with other disease processes, especially pulmonary diseases, and the diagnosis of CHF must be well founded. Congestive heart failure has many causes, some of which may be greatly improved with surgery. Congestive heart failure can be thoroughly assessed with a variety of noninvasive techniques. Echocardiography is particularly helpful in this regard.

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Mucocutaneous Lymph Node Syndrome: An Additional Case

EDWARD H. WITHERS, M.D., WILLIAM R. LONG, M.D., and JOHN B. LYNCH, M.D.

Mucocutaneous lymph node syndrome (MLNS), or Kawasaki disease, has only recently been recognized as a clinical entity in the United States. It was first reported in Japan in 1967, and almost 7,000 cases have subsequently been described.¹ The experience in the United States has been relatively limited, with only 40 cases well documented in the literature.²

The purpose of this report is to describe a patient with MLNS admitted to the Plastic Surgery Service at Vanderbilt University Medical Center in July of 1977. To our knowledge, this is the second case occurring in Tennessee and the 41st in the United States.³

The principal signs and symptoms include fever, conjunctivitis, erythema of the palms and soles of the feet, as well as lips and pharynx, generalized nonpruritic erythematous rash, non-suppurative cervical adenitis, and desquamation of the tips of the toes and fingers. It is usually a benign self-limiting disease, the etiology of which is unknown, but a 1% to 2% mortality has been reported.²

Case Report

An 8-year-old white girl was admitted to Vanderbilt University Hospital on June 7, 1977 for elective removal of a giant hairy nevus. The excision was uncomplicated. On the second postoperative day, she developed a fever (105 F), with nausea and vomiting. Appropriate cultures were obtained. There was no obvious source for the fever and the clinical picture was perplexing. Three days later, erythema of the palms, "strawberry tongue," conjunctivitis, nonpruritic generalized erythematous rash, and persistent fever (101 F to 102 F) were noted. She subsequently developed cervical adenitis and a white count of 23,700.

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The diagnosis of MLNS was entertained. The electrocardiogram was normal. Eight days following the initial febrile episode, desquamation of the finger tips began. The diagnosis of MLNS was clinically confirmed at this point. She remained febrile (100 F to 101 F) for four weeks. The fever never responded to antibiotic therapy and all cultures were subsequently negative.

Comment

A detailed history, including travel and exposure to insects, should be obtained when the diagnosis of MLNS is entertained since its clinical picture may be confused with other entities. Scarlet fever, Rocky Mountain spotted fever, Stevens-Johnson syndrome, rheumatoid arthritis, and viral syndromes should all be included in the differential diagnosis of MLNS and appropriate laboratory tests obtained before the diagnosis of MLNS is made. At present, the etiology of MLNS is unknown.

Our patient meets the currently accepted criteria for MLNS and her lack of response to antibiotics is also characteristic of the syndrome.

The outlook for MLNS is usually very favorable, but a 1% to 2% mortality has been reported.² Postmortem examination has revealed thromboendarteritis with subsequent thrombosis of the coronary arteries.

This patient represents an additional case of MLNS who presented with a confusing febrile postoperative course. Her recovery has been uneventful.



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Neuroblastoma

F. ANTHONY GRECO, M.D., Editor

Neuroblastoma is one of several malignant neoplasms of children. The myth that cancer is not a childhood disease is slowly fading. Fortunately steady progress in oncology, particularly pediatric oncology, has improved the prognosis for many children with cancer. Several children with acute leukemia, lymphomas, medulloblastoma, rhabdomyosarcoma and other tumors are being treated successfully today in contrast to only a few years ago. Progress has not been accidental, but is a result of determined effort at understanding the natural history and biology of each cancer, of continued efforts at developing more effective antineoplastic drugs, and of careful scientific controlled therapeutic investigations. Dr. Lukens will begin the discussion today.

JOHN N. LUKENS, M.D.:

It is appropriate that we consider the subject of neuroblastoma during Oncology Grand Rounds. This is a tumor which has major significance in pediatrics because of its frequency (it is the most common solid tumor seen in young children) and because of the multitude of guises under which neuroblastoma may travel. There are a host of clinical syndromes which neuroblastoma may be responsible for and, as a result, it is necessary for the pediatrician to include neuroblastoma in differential diagnoses more commonly than its numerical frequency would suggest necessary. Finally, this is a tumor for which innovative approaches to therapy are badly needed. At a time when most pediatric tumors are responding to developing programs of therapy, the overall cure rate for neuroblastoma in the year 1977 is not much different than it was in the year 1957;¹ this, despite the fact that there is an increasing array of chemotherapeutic agents which have activity against this tumor and despite the provocative observations that this is a tumor that appears to induce host immune responses. We will present a patient who has

recently been on our service for the purposes of illustrating the clinical features of this tumor and of introducing evolving therapeutic concepts. Dr. Roloff will present the patient.

JAMES S. ROLOFF, M.D.:

This 5-year-old white boy was admitted to Vanderbilt Hospital in September, 1976, with a six-week history of leg and abdominal pain and fever, which had become more frequent and severe in recent weeks. He was seen by his private physician who elicited the additional history of vague flank pain and a low-grade fever which occasionally spiked to 103.6 F. There had been a decrease in appetite and development of lymphadenopathy. The past medical history, family history, and review of systems was not helpful.

On physical examination he appeared chronically ill. He was quiet and pale. His temperature was 101 F, pulse 120, and respirations 26. The blood pressure was 114/74. There were numerous cervical lymph nodes which were rubbery, nontender, and freely movable. Lung and heart examinations were not remarkable and an x-ray of the chest was normal. The liver was 1 cm below the right costal margin and there was an 8.5 cm mass in the left upper quadrant, where a flat plate of the abdomen showed flecks of calcium. Scans of the liver and spleen and a metastatic survey of the long bones and skull were normal. Intravenous pyelography demonstrated a left suprarenal mass. The hematocrit was 35%; the white count 9,400/cu mm. Urine examination and liver function tests were normal. A 24-hour collection of the urine for metabolites of catecholamines had a vanillylmandelic acid (VMA) content of 90 $\mu\text{g}/\text{mg}$ creatinine (normal $3.3 \pm 1.4 \mu\text{g}/\text{mg}$ creatinine) and a homovanillic acid (HVA) of 14 $\mu\text{g}/\text{mg}$ creatinine (normal $4.7 \pm 2.7 \mu\text{g}/\text{mg}$ creatinine). On examination of bone marrow aspirate, foci of neoplastic cells with neurofibrillary material were identified.

Surgical exploration of the abdomen revealed a large retroperitoneal mass arising from the left adrenal and extending across the midline, encircling the aorta. Two thirds of the tumor was resected along with several lymph nodes; the residual was marked with silver clips. The liver was normal.

Histologically the tumor was described as a neuroblastoma with areas of ganglioneuromatous changes, necrosis, and calcification.

Applying Evans' classification, the patient was considered Stage IV.² At his age this supported the use of chemotherapy alone, which consisted of a five-day course of combination drugs: cyclophosphamide (Cytosan), vincristine (Oncovin), and dimethyltriazenoimidazole carboxamide (DTIC), repeated every 28 days. Following the five cycles of medication the VMA in a 24-hour urine collection was normal. An IVP demonstrated de-

creased size of the clipped area. A bone marrow was normal.

The patient was taken back to the operating room where a "second-look" procedure was done. A small nodule, with associated diffuse retroperitoneal fibrosis trailing across the midline, was all that was found. The area was considerably smaller than the primary tumor. Biopsy of the nodule and of a periaortic lymph node contained residual neuroblastoma, histologically unchanged from the primary tumor. The residual area was again outlined with silver clips and is being treated with radiation therapy. The patient will be continued on chemotherapy for a total of 24 months.

Dr. Lukens:

To summarize, we have a 5-year-old child who presented with fever and bone pain. On physical examination he appeared chronically ill and had a large mass in the left upper quadrant. This mass proved to be a neuroblastoma, which was incompletely resected. Neuroblastoma cells were also identified in the bone marrow. In response to chemotherapy, the child experienced deferescence, a rapid gain in weight, normalization of urinary VMA excretion, and disappearance of tumor cells from the bone marrow.

TABLE 1

CLINICAL SYNDROMES OF NEUROBLASTOMA

- Abdominal mass $\pm$ hepatomegaly
- Bone pain and/or swelling
 - Proptosis
 - Arthritis
- Spinal cord compression
- Acute cerebellar encephalopathy
- Fever of unknown origin
- Adrenergic symptoms
- Mediastinal mass
- Cervical "adenopathy"
- Myasthenia gravis
- Opsoclonus

The diagnosis was easily established in this child. The challenge is one of therapy rather than one of diagnosis, which is not always so easy. I might begin by discussing the variety of syndromes produced by neuroblastoma (Table 1). Perhaps the most common is that of an upper abdominal mass with or without associated hepatomegaly. If the tumor arises in the left adrenal gland, as it did in this child, the liver is not usually involved. There appears to be rapid spread to remote areas. Right-sided neuroblastomas more commonly are "hung up" in the liver. It is a tumor that metastasizes early to bone, and it appears the bones around the orbits are a particularly favorite site for tumor seeding. Children may present with proptosis or periorbital echymoses, or they may also present with a syndrome which looks very much like juvenile rheu-

matoid arthritis. Because it is a tumor which arises along the spine it not uncommonly presents with spinal cord compression.

There is a variety of syndromes which are probably related to biologically active substances produced by tumor cells. A pediatric neurologist, Patrick Bray, drew attention to a syndrome of acute cerebellar ataxia associated with neuroblastoma.³ When present, ataxia resolves following resection or regression of the tumor. This is a tumor that very commonly produces fever. In adult populations one considers a hypernephroma in the differential diagnosis of obscure fever—in the pediatric population, neuroblastoma. These are functional tumors, most, if not all, being associated with an increase in one or more of the catecholamine catabolites.⁴ Curiously, however, the symptoms associated with catecholamine production are the exception rather than the rule. No more than 10% of affected children have histories of flushing, hypertension, diarrhea, or excessive sweating. The presentation may be as a mass in the mediastinum or cervical area. Finally, there is a variety of other neurological syndromes which, though rare, are associated with neuroblastoma.

Before considering treatment it would be appropriate to comment on the natural history of the disease, since treatment is predicted on the anticipated course. There are two well-defined variables which have prognostic significance: one is the extent or "stage" of disease and the other is the age of the child at the time of diagnosis. Presented in Table 2 is a staging system which

TABLE 2

STAGING OF NEUROBLASTOMA

Stage I	Confined to structure of origin
Stage II	Confined to regional structures and nodes
Stage III	Extend in continuity across midline
Stage IV	Remote disease
Stage IV-S	Stage I or II plus disease in liver, spleen or bone marrow

has now been widely accepted. Of particular interest is Stage IV-S. Children having Stage IV-S disease are almost exclusively less than 12 to 14 months of age. They would be classified as having Stage I or II disease except for involvement of the liver, spleen, bone marrow, or skin. Curiously, children with Stage IV-S disease enjoy a good prognosis.

The child under discussion today is well be-

yond the age group of IV-S patients. Because of bone marrow involvement, he has Stage IV disease. Summarized in Table 3 is the two-year

TABLE 3
TWO-YEAR SURVIVAL RATES OF 234 CHILDREN WITH
NEUROBLASTOMA, 1947-1967*

Age (mo)	Stage					Total
	I	II	III	IV	IV-S	
<12	91%	93%	—	24%	90%	72%
12-23	80%	63%	43%	0%	—	28%
24+	—	33%	23%	3%	—	12%
Total	84%	66%	33%	5%	84%	32%

*From D'Angio, Evans, Koop: Lancet 1:1046, 1971

survival of a large group of children with neuroblastoma who were evaluated at Children's Hospital in Philadelphia. Comparable data have been garnered by Children's Cancer Study Group and by Acute Leukemia Group B. A two-year survival, free of disease in neuroblastoma, approximates a cure. It is apparent that survival is a function of stage of disease at diagnosis and of age. Localized disease is associated with a high two-year cure rate whereas disseminated disease, regardless of the age, is associated with poor survival. The overall cure rate of children with Stage IV-S disease is 84%. In this series there were only two children having IV-S disease who died. Both died as a result of therapeutic enthusiasm: one from infection during a period of drug-induced neutropenia and one as a result of complications of radiation therapy. Note also the effect of the age on overall survival. Seventy-two percent of the children less than a year of age appear to have experienced two-year control of disease. The child presented today is 5 years old with Stage IV disease, a combination attended by a very poor prognosis.

Let us turn next to the therapeutic challenge posed by this patient. The retroperitoneal tumor could not be surgically resected. Because of bone marrow involvement, it was felt that radiation therapy should be held initially. Both surgery and radiation therapy are potentially curative for localized disease. The problem posed by neuroblastoma is the frequency of disseminated disease at diagnosis. A full 70% of children with neuroblastoma present with Stage III and IV disease. For these groups of patients, the cornerstone of therapy has been chemotherapy, and the workhorses have been cyclophosphamide and vincristine. Using the two drugs together it

has been possible to achieve complete or partial remission in approximately 50% of children with Stage III and IV neuroblastoma. Unfortunately the remissions achieved are of short duration. The median duration of remissions induced with this combination is only about 60 days.

Within the last few years a number of other active therapeutic agents have been recognized. Children's Cancer Study Group has demonstrated antineuroblastoma activity for DTIC. Using a three-drug protocol (DTIC, cyclophosphamide and vincristine) an overall remission rate of 74% has been demonstrated. Of significance is the improved quality and duration of remissions achieved with the three drugs. Adriamycin, used as a single drug, also has activity against this tumor. A four-drug protocol utilizing adriamycin together with DTIC, vincristine, and cyclophosphamide is not superior to the three-drug regimen. The overall response rate and response duration is approximately the same, but the toxicity is greater. Based on the limited data available, it appears that the *in vivo* doubling time of neuroblastoma cells is quite long, on the order of 7 to 21 days. The three-drug protocol utilizes five sequential days of DTIC. Cyclophosphamide is given on day 1 and vincristine on day 5. Courses are repeated at three- to four-week intervals. Recently Children's Cancer Study Group has reported the activity of VM26 (a podophyllo-toxin derived from the May apple plant) against neuroblastoma. In a pilot program, about 50% of children with Stage IV neuroblastoma, refractory to other drugs, experienced either complete or partial remission when given VM26 alone. There are now plans to incorporate this into a prospective study.

Despite the fact that there are drugs having the potential for remission induction, recurrence of tumor has been the rule. The median time to tumor recurrence is five or six months. Usually recurrence is at the primary site. In an effort to interrupt this pattern, the role of second-look operations is currently being assessed. The rationale for a second operative procedure is based on the premise that an inoperable tumor may have been rendered surgically resectable by chemotherapy. If not resectable, the limits of residual tumor might be defined in preparation for radiation therapy. I would like to ask Dr. Roloff to review experience with second-look operations in children with Stage III and IV neuroblastoma.

Dr. Roloff:

As Dr. Lukens has pointed out the second-look operations may provide additional, therapeutically important information about patients with neuroblastoma.

The rationale for reoperating is based on several observations. Using routine chemotherapy, 75% of the patients with metastatic neuroblastoma will have a clinical response. This response may be incomplete with persistent evidence of tumor mass or elevated catecholamine excretion in the urine. Those with a complete response fare much better than partial responders. Nearly two thirds are alive for more than 18 months, while patients with persistent clinical evidence of tumor have significantly shorter periods before relapse and death.

The problem is in identifying those patients who have no clinical or laboratory evidence of neuroblastoma, i.e., clinical complete responders, who in fact do have tumor remaining and who may benefit from a more aggressive approach. In a pilot study the use of the second-look was evaluated by Children's Cancer Study Group. Patients were divided into three groups: Group 1, children with only biopsy proven disease; Group 2, children having initial tumor resection only; and Group 3, children who had an operation approximately five months after beginning therapy (second-look or in some cases a delayed first look). The children were treated with the chemotherapeutic regimen previously outlined. Mortality was 72% in Group 1, 57% in Group 2, and 39% in Group 3. The median survival for Group 1 and 2 combined was 6.5 months, while it has not been reached as yet for Group 3. Interestingly, 96% (22/23) of children with a clinical response, many with a "complete" response, had residual tumor, but several showed histologically more mature tumors than the original tissue.

Thus the second-look operation may be able to (1) estimate the effectiveness of previous surgery, radiation therapy, and chemotherapy; (2) allow resection or debulking and re-marking of residual tumor; and (3) "re-stage" the patient, supporting a change or continuation in the therapy, and hopefully prolonging survival.

Dr. Lukens:

It was our hope in the patient presented today that a second-look operation would permit resection of a tumor which had previously been

inoperable. The tumor, though reduced in size, could not be resected in toto.

The second-look operation, then, permitted definition of residual tumor so that intensive radiation could be delivered with precision. The appropriateness of a therapeutic program with curative intent might be questioned in view of documented bone marrow disease. So long as there is not radiologic evidence of bone erosion, marrow involvement with neuroblastoma may be effectively treated with chemotherapy. It would appear that free-floating tumor cells in the bone marrow do not necessarily portend a poor prognosis.

A Physician:

Did the chemotherapy really change the clinical course in this patient? One could speculate that the initial resection or debulking operation was responsible for the improvement observed.

Dr. Lukens:

To be sure, much of the initial improvement was the result of the debulking procedure. Urinary levels of VMA and HVA dropped rapidly. It is possible, too, that tumor debulking enabled host immune responses to better cope with residual tumor. There is reasonably good evidence that this occurs, particularly in the younger child. Shrinkage of metastatic foci may follow removal of a large primary tumor. The strongest argument in favor of a chemotherapeutic effect is the duration of remission. Unmaintained remissions following surgery for Stage III and IV disease are short-lived. The duration of remission is in keeping with a chemotherapeutic response. The natural course of Stage III and IV neuroblastoma in a child of this age is one of progressive involvement. The most convincing evidence for the role of chemotherapy is the disappearance of tumor from the bone marrow and the regression of retroperitoneal tumor. Without chemotherapy, an early relapse would have been expected.

Clearly, we have much to learn about the treatment of this tumor. I might conclude by describing observations which suggest another approach to therapy. There are a number of reasons for pursuing the definition of immune responses to neuroblastoma (Table 4). First, numerous incidents of spontaneous regression of advanced neuroblastoma have been well documented. Secondly, the incidence neuroblastoma confined to the adrenal gland in infants dying at less than three months of age exceeds by 40 times that

TABLE 4
CLINICAL EVIDENCE OF IMMUNOLOGIC RESPONSE
TO NEUROBLASTOMA

Spontaneous regression of overt disease
In situ tumor > 40x expected incidence
Correlation tumor lymphocytes and prognosis

which would be expected. This suggests a high incidence of spontaneous regression. Finally, there appears to be a correlation between prognosis and numbers of lymphocytes and plasma cells in blood.

Prompted by these observations, the Hellströms have developed techniques for the study of immune response to neuroblastoma cells.⁵ One of the several assays they have developed permits assessment of the interaction between lymphocytes and tumor cells. When cultured *in vitro*, neuroblastoma cells form tumor colonies. The addition of lymphocytes from normal individuals to the cultures is without apparent affect. Lymphocytes from children with neuroblastoma, however, appear to inhibit the growth of tumor cells but not skin fibroblasts. Lymphocytes from affected children are reactive against a panel of neuroblastoma cells, suggesting that the cells may share a common tumor-associated antigen. Failure of lymphocytes to halt tumor growth *in vivo* appears to be due to a serum blocking factor (thought to be an antigen-antibody complex) which interferes with lymphocyte-tumor cell interaction. Serum from children with progressive disease contains the blocking factor whereas serum from children with resolving disease ap-

pears not to contain the factor. The Hellströms have also described "unblocking" antibodies which neutralize the blocking effect of serums from subjects with actively growing tumors. Finally, antibodies directly cytotoxic for neuroblastoma cells have also been described.

The therapeutic payoff of these provocative observations has yet to be realized. The place for immunotherapy in Stage III and IV neuroblastoma is currently under investigation by Children's Cancer Study Group and others. The experience with BCG and with extracts of neuroblastoma cells for immune stimulation have been disappointing, but obviously a great deal of work remains.

ROBERT K. OLDHAM, M.D.:

Although the information initially presented by the Hellströms was exciting, recent scrutiny of the assays utilized to measure lymphocyte reactivity has dampened the early excitement. There are definite technical problems associated with the current assays of cell-mediated immunity to human tumors,⁶ which may have affected the results. Recent investigations have not confirmed the specific cytotoxic or cytotoxicity reactivity against neuroblastoma cells. Thus the application of immunotherapy based rationally upon the earlier *in vitro* data may not be valid, and may partially explain the poor immunotherapeutic results mentioned by Dr. Lukens. I certainly agree that immunologic mechanisms may be responsible for the high spontaneous remission rate in younger patients with neuroblastoma, and an understanding of this phenomenon may eventually result in a therapeutic advance. 

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W. BARTON CAMPBELL, M.D., Co-Director

An 18-year-old man was admitted to St. Thomas Hospital following the sudden onset of substernal and left chest "throbbing, hard" pain. This awakened him from his sleep at 3:30 a.m. It increased somewhat with deep inspiration and with motion and it was improved by sitting and leaning forward. He had a history of a mild flu-like illness a week prior to admission. There was no family history of cardiac disease. He had no known previous illnesses. An electrocardiogram was obtained (Fig. 1).

strongly suggestive of pericarditis. Repolarization changes with pericarditis are indistinguishable from changes seen with ischemic epicardial injury, and indeed are due to inflammation of the subjacent epicardia. They are also at times difficult to differentiate from "normal early repolarization." The prominence of the J point elevation in standard lead I in this patient is more suggestive of pericarditis than normal early repolari-



Figure 1

Discussion

The tracing shows normal sinus rhythm, a rate of 75 per minute. The PR interval is normal. The QRS morphology is normal. The J point is elevated in leads I, II, AVL and in the precordial leads. Maximum J point elevation is 1.5 mm in standard lead I.

ST-T wave changes are invariably nonspecific.¹ In this clinical setting, however, the changes are

zation. On physical examination he was found to have a loud three component pericardial friction rub. No further tests were carried out. He rapidly clinically improved and follow-up tracings were within normal limits.

Final Diagnosis: "Acute benign" pericarditis.

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From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

Pulsatile Abdominal Mass

ARTHUR C. FLEISCHER, M.D., and ANTHONY DOWLING, M.D.

A 62-year-old veteran was admitted for evaluation of a pulsatile abdominal mass measuring 6 x 8 cm and intermittent claudication of his right leg. Abdominal radiographs failed to reveal any evidence of abnormal intra-abdominal calcifications. An abdominal sonogram was performed to exclude an abdominal aortic aneurysm.

A longitudinal scan taken 1 cm to the right of the midline (Fig. 1A) demonstrated aneurysmal dilatation of the distal 12 cm of the abdominal aorta. Narrowing of the lumen of the vessel distal to the region of the origin of the renal arteries was also noted. Laminated thrombi could be outlined on both the anterior and posterior aortic walls. The size of the patent lumen

could be appreciated because of its relative sonolucency when compared to the surrounding thrombus. The aneurysmal portion of the aorta measured 5 cm on the transverse scan (Fig. 1B). The inferior vena cava was outlined posterior and to the right of the aneurysm and the concentric shape of the thrombus within the aortic wall could be appreciated.

An abdominal and pelvic angiogram was performed in order to exclude aneurysmal involvement of the renal, iliac, and femoral arteries. A 40% stenosis of the distal abdominal aorta was noted as well as tapered narrowing of the lumen of the distal abdominal aorta (Fig. 2). The superior mesenteric artery was displaced to the left by the widened distal abdominal aorta. Branches from the superior mesenteric artery also appeared to drape over the aneurysmal aorta. Finally, an 80% stenosis of both the right and left common iliac arteries was shown.

Discussion—

Since only a small proportion of patients with

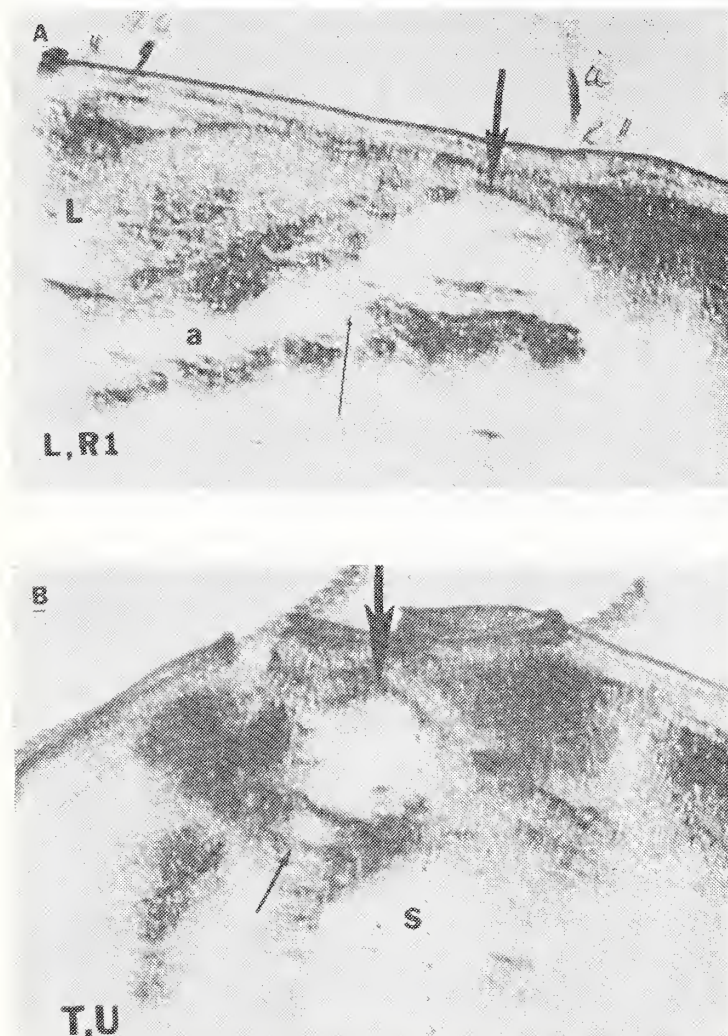


Figure 1 (A). Longitudinal scan. L=liver; a=aorta; small arrow=narrowing of lumen; large arrow=laminated thrombi. (B). Aneurysmal portion of aorta (large arrow); s=spine; small arrow=outlined inferior vena cava.

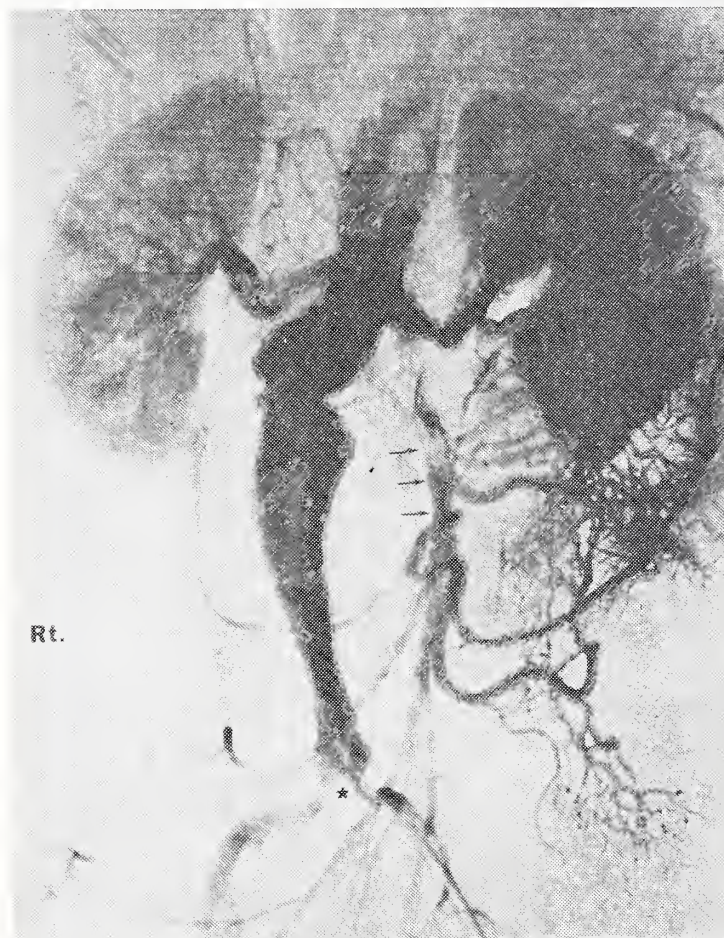


Figure 2. Abdominal and pelvic angiogram. Small arrows=displaced mesenteric artery; asterisk (*)=stenosis of iliac arteries.

From the Department of Radiology, Vanderbilt University Medical Center, Nashville, TN 37232.

abdominal aortic aneurysms can be diagnosed on plain radiographs of the abdomen, sonographic examination is the procedure of choice for the initial evaluation of patients presenting with a pulsatile abdominal mass. When compared to angiographic procedures, sonography is easier to perform, noninvasive, and equally as specific for aneurysmal dilatations of the abdominal aorta.¹ The size of the patent lumen as well as the amount of thrombus can usually be delineated using sonography. The abdominal aorta is considered aneurysmal if it measures over 3 cm in diameter. Enlarged periaortic lymph nodes can obscure the outline of the abdominal aorta but are usually nodular in shape.

The extent of aneurysmal involvement of the abdominal aorta and its branches, particularly

the renal, common iliac, and femoral arteries is best evaluated by angiography. Similarly, occlusion of the abdominal aorta with the development of collateral flow can also be identified by angiography. Therefore, if an aneurysm of the abdominal aorta is identified by sonography, abdominal and pelvic angiography should be performed in order to assess involvement of the branches of the abdominal aorta. 

Acknowledgement. The authors would like to thank Dr. A. James Gerlock, Jr., and Mrs. Dean Birdwell, Mr. Dennis Wyatt and R. L. Douglas for their contributions to this paper.

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The Antinuclear Antibody (ANA) Test in a Nutshell

SAMUEL H. DILLARD, JR., M.D.

This basic and brief discussion of the antinuclear antibody test, or ANA, has been stimulated by the many inquiries we have had in our laboratory over the last two years concerning the significance of a positive ANA test in a particular patient, the significance of the reported nuclear staining pattern or patterns, and the significance of the titer reported. This "nutshell" article is not intended by any means to shut the door on these interesting conversations, but rather, by writing this, I am forced to organize my basic knowledge to better answer these questions and hopefully to present a data base to which we all may add, now and in the future. All that follows in the next few paragraphs may be well known to many physicians.

The ANA test came as a logical consequence of the time-honored LE cell test, as it is indeed one or more of these antinuclear antibodies in the sera of patients with systemic lupus erythematosus that play a role in the production of the LE cell.^{1,2,3} In many clinical laboratories and medical centers the immunofluorescent ANA test with patterns and titers has replaced the LE cell test and other tests for screening patients with suspected connective tissue disorders. The ANA test offers great sensitivity and ease of performance, it is positive in a broad range of connective tissue disorders, and in most cases, the absence of a detectable antinuclear antibody is exceedingly strong evidence against the diagnosis of systemic lupus erythematosus if the patient has not been treated with corticosteroids or immunosuppressive drugs.^{2,3,4}

These circulating antinuclear antibodies are formed by the major classes of immunoglobulins and are not organ or species specific.^{3,5} They show specificity for the various nuclear antigenic

components, some being anti-DNA, some reacting specifically with DNA-histone (nucleoprotein), and others being antihistones, antiacidic nuclear proteins (anti-Sm and anti-RNP), and antinucleolar RNA.²

My experience in detecting these antinuclear antibodies is based on indirect immunofluorescent methodology. In this type of ANA test, whole nuclei present within commercially available human epithelial cells fixed to a slide are used in our laboratory as the antigen. Other common antigenic substrates used today include chicken erythrocytes, human leukocytes, tissue culture cells, and rat or mouse kidney.² Rat liver was a favorite substrate in the past in the laboratories in which I trained. Appropriate dilutions of the patient's serum, possibly containing antinuclear antibodies, are applied to the whole cells and allowed to incubate. Following washing, a solution of fluorescein-labeled antihuman globulin is applied which will react with and "stain" any antinuclear antibody-antigen complexes that have formed. The preparation and positive and negative controls are then examined under a fluorescent microscope for the presence or absence of specific patterns of nuclear fluorescence.¹

A positive test in our laboratory is now one in which serum diluted 1:20 yields nuclear fluorescence regardless of pattern. All samples showing a positive reaction at 1:20 are titrated to the end point of reactivity and the ANA titer is reported as the highest dilution at which fluorescence is observed. By using a 1:20 dilution, we avoid low titers of antinuclear antibodies occurring in normal individuals. Approximately 1% to 4% of healthy "normal" individuals can be found to have low titers ($<1:16$) of ANA activity in their sera and this increases with age, being up to 20% in healthy patients over the age of 60.^{1,2,4,5} A titer of 1:16 or greater is usu-

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

ally present before one is able to demonstrate a positive LE cell test.⁶

In a number of laboratories, ours included, four major fluorescence patterns are recognized that correspond to the type of antinuclear antibody present:^{1,2}

1. The homogeneous pattern (H) or total nuclear fluorescence which is attributed to antinuclear antibody reacting with DNA-histone nucleoprotein.

2. The rim pattern (R) or peripheral (ring) fluorescence pattern which is attributed to ANA reacting with DNA and soluble DNA-histone.

3. The speckled pattern (S) which is attributed to ANA reacting with soluble material (SM antigen) and ribonucleoproteins.

4. The nucleolar pattern (N) which is attributed to ANA reacting with nucleolar RNA.

ANA titers and patterns from different laboratories may vary due to the use of different methodologies and antigens. Also occasional positive sera show more than one pattern of nuclear staining, and fluorescent patterns may change with dilution. As yet no single pattern has been found to be diagnostic of any one disease.^{1,2}

There are rough correlations in the literature among the different patterns and different collagen vascular diseases.^{1,2} Examination of selected cases presented to our laboratory seems to agree with these reported correlations. We see more high-titer homogeneous and rim patterns in patients with diagnostic clinical and laboratory parameters of systemic lupus erythematosus. Pa-

tients with progressive systemic sclerosis (scleroderma) and patients with the diagnosis of mixed connective tissue disease shows a greater frequency of a speckled pattern. The nucleolar pattern is also seen with high frequency in patients with systemic scleroderma.

In Table 1 information on the prevalence, titer, and nuclear "staining" patterns of the ANA in various connective tissue disorders is presented. This is adapted from material presented by Kurt J. Bloch, M.D., at a course in Immunopathologic Techniques in Diagnostic Pathology conducted at the International Academy of Pathology meeting in Toronto, Ontario, Canada, March, 1977.

In interpreting a positive ANA test in a particular patient, the physician should be aware that diseases other than classical collagen vascular diseases are occasionally associated with circulating antinuclear antibodies. Some of the chronic hepatitides, cryptogenic cirrhosis, and ulcerative colitis are prime examples. Others include infectious mononucleosis, malignant lymphoproliferative disorders, pernicious anemia, leprosy, tuberculosis, and various malignant neoplasms.^{1,7} Also, positive ANA tests have been found in patients associated with the ingestion of certain therapeutic agents such as hydralazine, procainamide, diphenylhydantoin, methyldopa, sulfonamides, isoniazid, mesantoin, and PAS.^{1,8}

In a nutshell, the immunofluorescent ANA test is a very sensitive and practical screening test for patients suspected of having systemic lupus erythematosus or other collagen vascular diseases.

TABLE 1
PREVALENCE, TITER, AND PATTERNS OF ANA
IN CONNECTIVE TISSUE DISORDERS

	% positive	Titer†	H*	S*	R*	N*
Systemic lupus erythematosus	98-100	High	++	+	+++	(+)
Chronic discoid lupus	39 (22-57)	low-mod	+++	++	+	
Progressive systemic sclerosis	70 (44-87)	mod-high	++	+++	+	++
Rheumatoid arthritis	45 (27-56)	low-mod	+++	+	+	(+)
Juvenile arthritis	23 (14-38)	low-mod	+			(+)
Sjogren's syndrome	60 (25-77)	mod	+++	++		(+)
Mixed connective tissue disease	100	mod-high	+	++++	+	(+)
Raynaud's disease	63	—		+		
Polyarteritis nodosa	17 (14-18)	low				
Polymyositis	32 (22-75)	mod	+	+	+	

*H—Homogeneous pattern

*S—Speckled pattern

*R—Rim pattern

*N—Nucleolar pattern

† Titer quantitation in our laboratory

low 1:20 to 1:40

mod 1:80 to 1:160

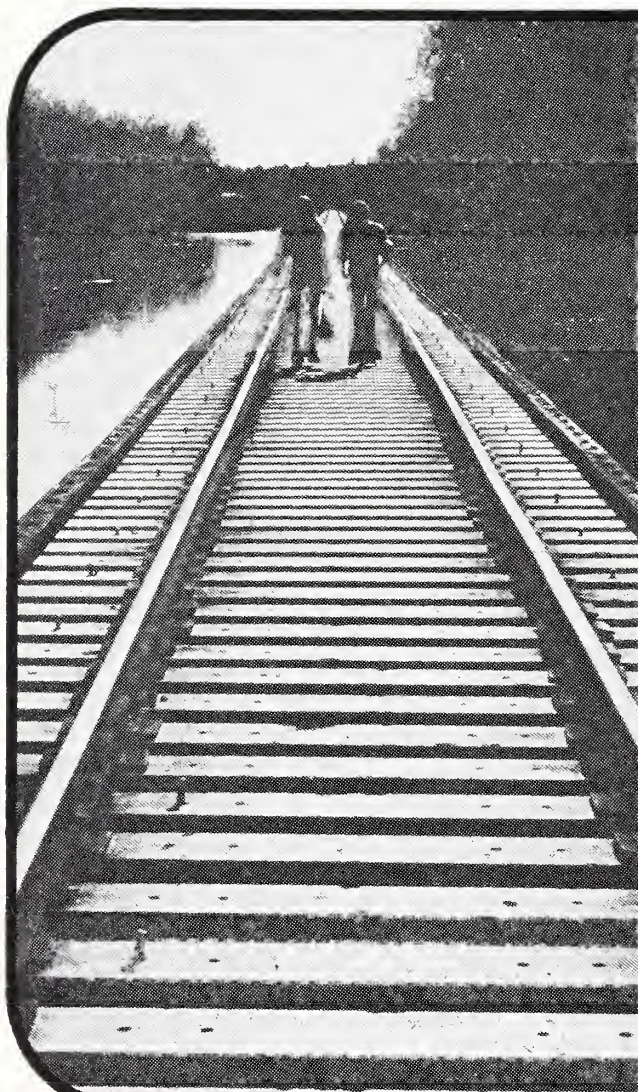
high 1:320 to 1:1280

Other laboratory tests to be considered for definitive evaluation of systemic lupus erythematosus and related disorders would include the following:²

1. LE cell test.
2. Anti-DNA antibodies by agglutination, radioimmunoassay or fluorescence.
3. Agglutination tests for antibodies to SM and RNP nuclear antigens.
4. Serum cryoglobulins.
5. Rheumatoid factor.
6. Serum complement (total CH₅₀ or quantitation of specific complement components as C₄ or C₃).
7. Tests for detection of circulating immune complexes.

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Hypernephroma

ROBERT L. BELL, M.D.

Ten months prior to admission this 39-year-old woman developed vague epigastric pain occasionally associated with shoulder pain. Upper GI x-rays and a cholecystogram were normal. Ten days prior to admission nausea with epigastric pain radiating to the intercostal area on the right developed. CBC, urinalysis, and SMA 12 chemical screen were normal. An ultrasound examination of the gallbladder was ordered. The

gallbladder was normal, but a 5 cm right renal mass was found in the lower pole of the right kidney (Fig. 1). The right renal vein and inferior vena cava appeared free of tumor (Fig. 2).

A 99m technetium dimercaptosuccinic acid scan of both kidneys revealed a cold area in the lower pole of the right kidney (Fig. 3). The configuration of this mass on the isotope scan (Fig. 4) was similar to the mass on the ultrasound scan. The 99m technetium flow study

Continued on page 748

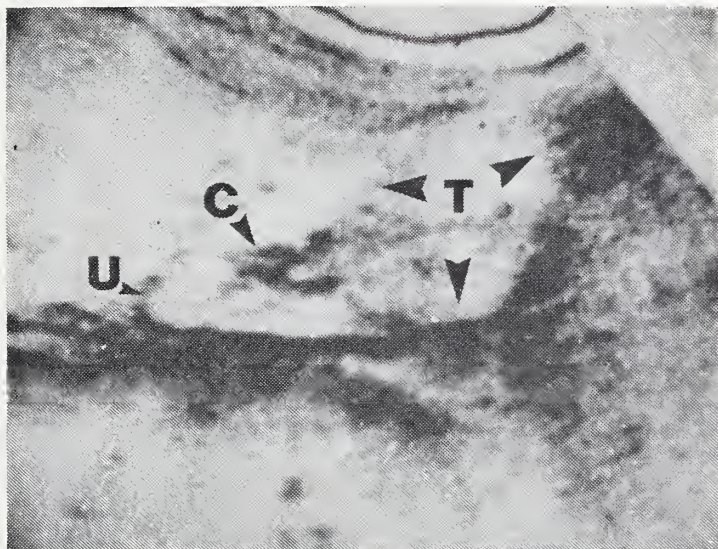


Figure 1. T=tumor, C=calyx, U=upper pole

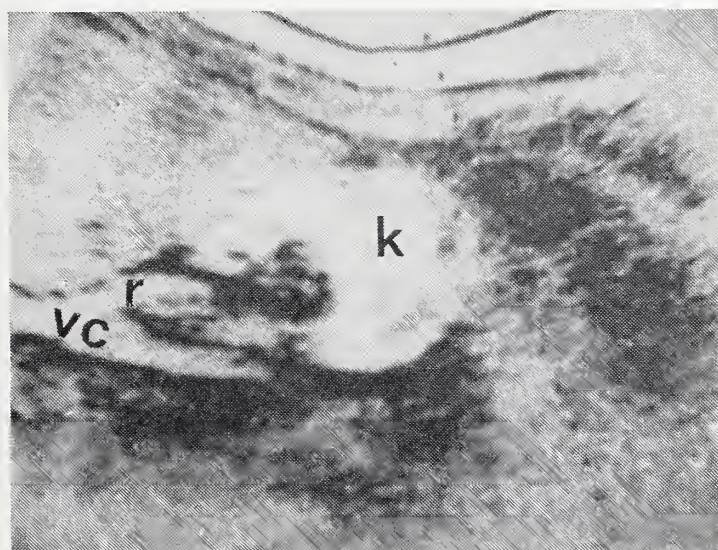


Figure 2. K=kidney, R=renal vein, VC=vena cava

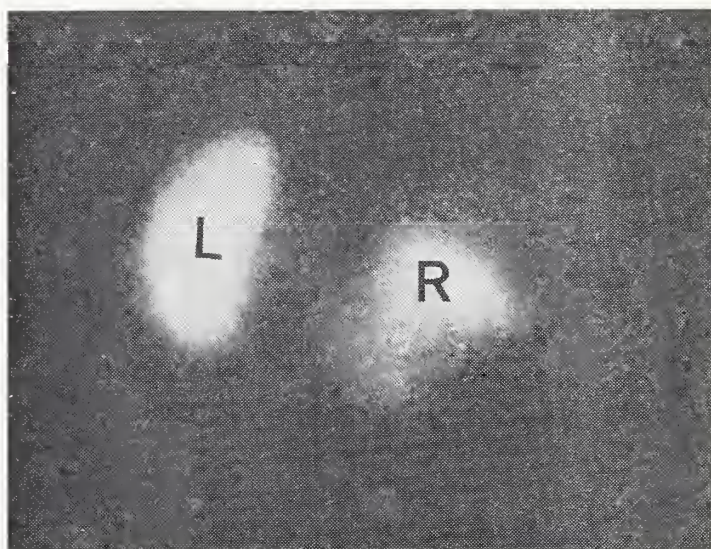


Figure 3. R=right, L=left



Figure 4. T=tumor

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

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Credentialing Procedure Established for A&D Counselors

LEE SEITZ

Increased public awareness regarding the importance of providing quality care to persons who abuse alcohol and/or other drugs has brought about a recognition of the need for improvements in the field.

Employers are beginning to realize that treatment, not firing, is a more cost efficient and desirable way to deal with the person who suffers from some form of substance abuse. Government agencies—state, local, and federal—are establishing units to cope with the problem of abuse. And families are beginning to seek help not only for the member affected but for the others.

This increased interest is causing attention to be focused on the person most often employed to provide treatment for the abuser—the alcohol and drug counselor. Many counselors are employed in alcohol/drug programs in industry, by churches and educational institutions, by private hospitals and clinics, and by other private and public agencies.

In Tennessee, most of these counselors are professionally trained, but some are recovered alcoholics and drug abusers who have also proven themselves most capable.

In an effort to ensure that treatment programs will be of high quality, national and local attention is presently being directed toward the upgrading of professionalism in the field of counselor competencies.

Two years ago, the Tennessee Department of Mental Health and Mental Retardation Alcohol and Drug Abuse Section recognized the need to assess counselor competency and develop a system for credentialing of alcohol and drug counselors. A statewide credentialing task force was appointed. This task force consisted of 22 persons representing those working with, and

concerned about, alcohol and drug abusers. It met five times between September 1975 and November 1976, and a voluntary certification program was developed.

It was also decided that certification should not be misconstrued as licensure since it does not grant permission to practice, but provides for a minimum level of competency below which the consensus of the field of counseling considers undesirable.

As the task force attempted to establish separate standards for alcoholism counselors and for drug abuse counselors, they found a considerable overlapping of knowledge, information, and resource material, especially in the areas of physiology, pharmacology, psychology, and counseling. The case records of the counselors indicated that many of their clients were involved with both alcohol and other drugs. The only difference in alcohol and other drugs seemed to be in the social attitude toward alcohol. To expedite the certification program, the task force treated alcohol as “just another drug” except in the areas of sociology and law. Instead of “alcoholic” and “drug addict,” the client was termed “substance abuser” and the counselors designated as “substance abuse counselors.”

By November 1976, the task force had submitted a *Proposed Procedure for Certification of Substance Abuse Counselors*. The procedure was approved by the commissioner of mental health and mental retardation and by the state attorney general's office. The certification program was implemented April 1, 1977, and the first 11 counselors were certified under a “grandfather clause” on June 1, 1977.

Several aspects of the certification program as formulated by the task force seem to be unusual in the national area of credentialing. In the approximately 30 states having some form of cre-

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

credentialing for substance abuse counselors, most of the credentialing is done either by a state agency or by a professional counselor organization. This has caused some misunderstanding and/or other difficulties between these two elements as well as with the practicing counselors.

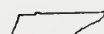
In Tennessee, the TDMHMR and the professional counselors are sharing the responsibilities of the certification program. The task force recommended nine substance abuse counselors to the commissioner of mental health and mental retardation who appointed them to function as the Substance Abuse Counselor Certification Committee to screen, evaluate, and recommend for certification those applicants meeting the certification standards.

The commissioner, upon recommendation of the committee, may issue the certificate which is signed by both the commissioner and the committee chairman. There is also a statewide advisory board to assist the committee. Most of the committee members are also members of the Professional Alcohol and Drug Abuse Counselors of Tennessee (PADCT). PADCT has a representative on the advisory board. None of the committee or board members are TDMHMR central office employees. The only central office employee directly involved is the credentialing consultant who coordinates administration of the program for the committee. As no fee is charged, funding for developing and implementing the program was provided by a federal grant; continuation of the program is being funded by the state. With the various duties divided between the state and the professionals, the certification program is being received with enthusiasm.

Another unusual feature of the certification program is that there is only one level of certification. The minimum educational requirement is high school or GED certificate—but—all applicants, whether GED or doctoral degree must take a written and oral examination and have a written evaluation submitted by a supervisor. Certification is granted on the basis of results of these three components.

A third distinctive feature is the method by which the test instrument for the written examination is being constructed. Fifteen faculty members of ten higher education institutions—all experts in their own fields, having knowledge of, and/or interest in, substance abuse—have developed the test items. These items were reviewed by professional substance abuse counselors to insure as much relevancy as possible. The final construction of the test is being done by the Tennessee Department of Personnel Research Division. The test project is being closely observed by national public and private agencies as an innovative procedure.

One of the contributing factors to the success of the test project has been the very close cooperation between the academic and clinical staff of the colleges, universities, hospitals, and clinics. A rapport has been established in the area of substance abuse that could have far-reaching effects in treatment and prevention.

Information concerning the certification program may be obtained from the Alcohol and Drug Services of the Tennessee Department of Mental Health and Mental Retardation, 501 Union Building, Nashville, TN 37219. 

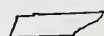
Topics in Nuclear Medicine and Ultrasound . . .

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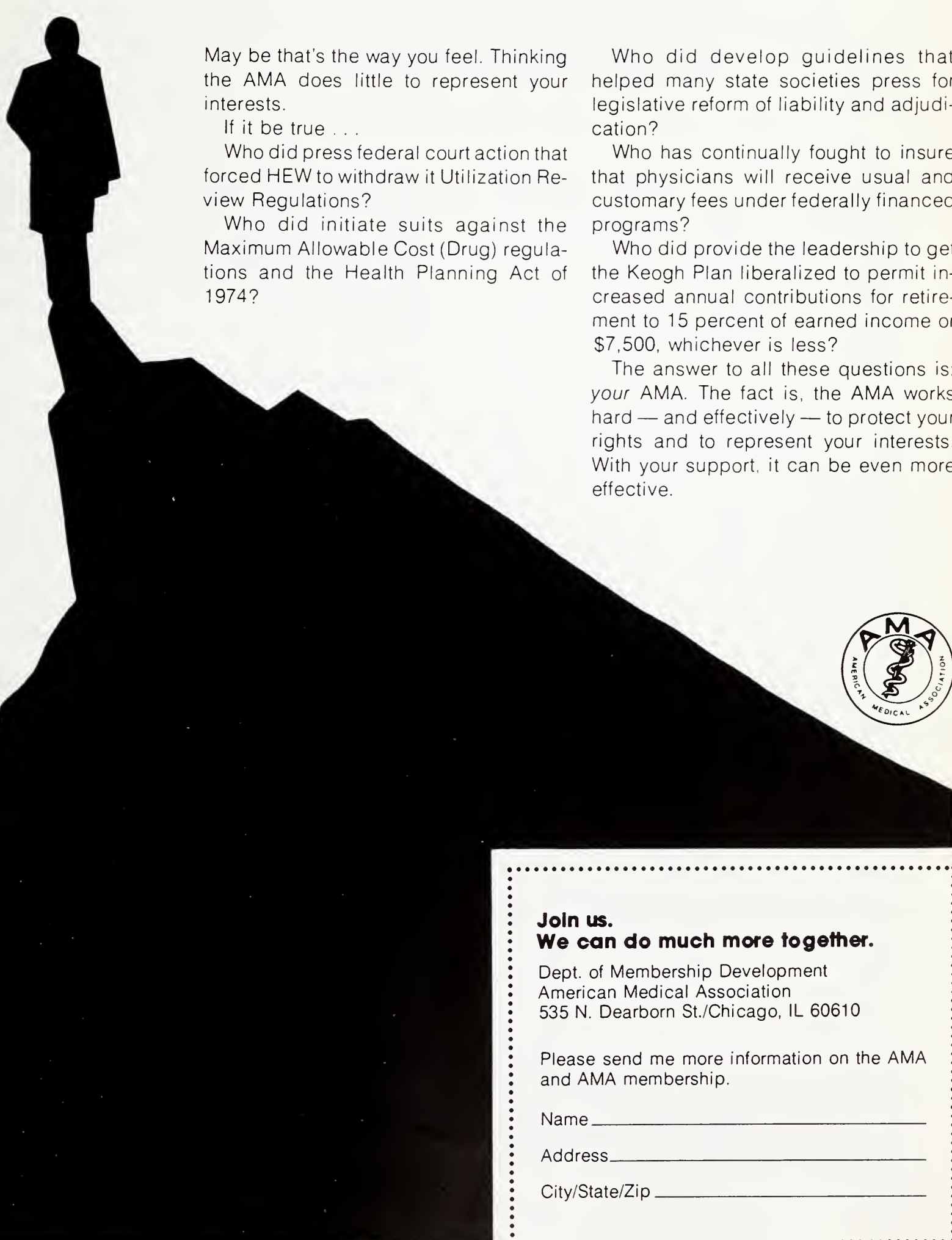
showed normal to slightly reduced flow in the right renal mass. The angiogram and the IVP showed a relatively avascular mass.

At surgery, the right kidney was removed, revealing a hypernephroma, 5 cm in diameter, at the lower pole. No tumor was noted in the

renal vein.

In this case, the tumor not only was more accurately characterized by the ultrasound study than by the IVP or angiogram, but also was easily detected during a routine ultrasound survey of the gallbladder without intravenous dyes and without ionizing radiation. 

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The Practicing Physician and Smoking Cessation

NORMAN HYMOWITZ, Ph.D., Newark

Few members of the scientific community find fault with the surgeon general's (1964) report that cigarette smoking is hazardous to one's health.¹³ The association between smoking and cancer, emphysema, and heart disease is now firmly documented. Despite these findings, cigarette smoking remains an important health problem for a large segment of the American population.

While many physicians have been in the forefront in the fight against smoking, doctors on the whole have not played as significant a role as one might expect. Green and Horn, for example, found that about one in every four in their sample of American doctors did not accept responsibility for persuading patients to curtail smoking.⁶ In a British study, McKennell and Thomas reported three of every four adult smokers denied ever having been advised to stop smoking by a doctor.¹⁰

There may be a number of factors which tend to reduce physician involvement.^{3,8} Many physicians still smoke. Recent estimates suggest that 27% of male and 42% of female doctors smoke.^{4,5,11} One can hardly expect physicians who smoke to play an important role in smoking cessation.

Other factors mentioned were (1) traditional training of physicians which emphasizes care and cure of the sick rather than prevention, (2) the depersonalization of medical practice, and (3) the prevalent view that intervention on habit of life style is an invasion of privacy.

The appeal to practicing physicians for more

Presented at the Second Annual Governor's Conference on Primary and Preventive Medicine at the 210th Annual Meeting of The Medical Society of New Jersey, June 5, 1976, at Cherry Hill. Dr. Hymowitz is assistant professor in the Department of Psychiatry, New Jersey Medical School, CMDNJ, Newark.

Reproduced with permission from the *Journal of the Medical Society of New Jersey*, (98:139-141, 1977).

active participation in smoking cessation occurs quite frequently in the literature.^{3,8,12} Two levels of involvement have been stressed. One level entails community action through health education. The other involves the interaction between the physician and his patients. The present paper deals with the latter.

Physician-Patient Interaction

It is clear that simply informing patients of the health hazards of smoking and advising them to quit as they walk out the door will not help very many smokers. Studies of the effectiveness of physicians' advice to quit smoking reveal "quit rates" among the patients at one year follow-up as low as 0%.⁹ As noted by Blackburn, enthusiastic physicians may help approximately 25% of their patients quit smoking.³ Such compliance records may prove quite frustrating to the physician as well as the patient.

It is important to note that the results of highly effective quit-smoking programs are seriously compromised by high rates of recidivism which occurs following the termination of treatment.⁷ Since physicians often remain in contact with patients intermittently over a great number of years, the physician is in a unique position to obtain long-term success if he takes advantage of the possibilities for long-term intervention.

At a minimum, physicians must show genuine concern and empathy toward the patient. Despite the very real dangers of smoking, there are many factors which make it very difficult for many smokers to quit. The possibility exists for referral of the patient to local smoking cessation programs. The concerned and aware physician should have available readily a list of such programs and descriptive brochures.

The physician should also be prepared to spend more time with the patient discussing smoking and

smoking cessation. Becker suggests that certain beliefs must be present before people engage faithfully in preventive medical procedures.¹ Briefly, they must believe they are at risk of some disease, that their risk of disease can be lowered by the measures they are asked to take, and the cost of engaging in preventive measures must not outweigh the perceived benefits. The latter belief can be quite troublesome since human behavior seems to be governed by immediate consequences rather than some consequences which may or may not occur many years in the future.

Thus, physicians must deal with the patient on a very personal level. Why is smoking particularly dangerous to this particular patient? If the patient is hypertensive, for example, they might discuss at length the relationship between cigarette smoking and heart disease. Moreover, what does this particular patient have to gain from stopping smoking? Who is in a better position to discuss and provide feedback on beneficial changes in the health of the patient than the physician?

Behavioral Modification

To carry physician involvement one step further, it is possible to plan with the patient steps toward smoking cessation. The behavioral science literature on smoking cessation offers a wide range of procedures and techniques.² By taking advantage of continuing education programs in behavioral management, the physician may become a more effective agent of behavior change.

Whether the doctor refers the patient for smoking treatment or initiates a program on his own, it is most important to follow up these activities. Did the patient go to the clinic, quit on the selected quit date, or cut down to a given number of cigarettes? Each visit to the physician's office should be viewed as an additional opportunity for counseling and discussing the issue of smoking cessation. Moreover, intermittent contacts between visits by the telephone or through the use of the mail may serve to increase the likelihood of compliance.

These contacts need not be time consuming and can be carried out by the nurse, secretary, or volunteer. Such frequent contact shows that the physician and his staff are concerned about the patient and feel that smoking cessation is an important goal. For patients trying to quit by some step-by-step procedure, these contacts may serve to specify new steps and strategies.

Once the patient has made some significant

change, the task becomes one of combating recidivism. A personal congratulatory letter from the physician may serve to reinforce the desirable changes. For patients having difficulty accomplishing goals, the possibility exists for referral to established treatment programs or, perhaps, prescription of minor tranquilizers for a short period of time to take the "edge" off quitting.

Whether or not the physician becomes actively involved in smoking cessation, it is possible to contribute greatly to health education. The physician's waiting room could be put to good use by housing antismoking literature, audiovisual presentations on smoking, and self-instructional audio cassettes on techniques for quitting cigarettes. Moreover, the nursing staff could also play a role by actively discussing with the patients issues and questions concerning smoking and other matters germane to preventive medicine.

As noted above, one critical issue in behavior change programs concerns the cost/benefit ratio and long-term versus short-term satisfaction. Physicians and their staff can play an active role in fostering the attitude that not-smoking is a worthwhile goal in itself. Rather than giving up smoking, the patient is acquiring good health and the prospects for a better and fuller life. To the extent that immediate incentives for behavior change are available, the prospects for better compliance in many areas of health behavior are improved. One important incentive which ought to exert considerable control over behavior is money. To the extent that smoking cessation is important to the physician and patient, some reduction in fees for annual examinations for nonsmokers and ex-smokers may facilitate greatly desirable changes in behavior.

100 Bergen Street
Newark, N.J.

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Brand	Type	Tar (mg/cig)	Nicotine (mg/cig)
Carlton 70's	Reg. size, filter	<0.5	<0.5
Carlton	King size, filter, menthol	1	0.1
Carlton	King size, filter	1	0.1
Now	King size, filter, menthol (hard pack)	1	0.1
Now	King size, filter (hard pack)	1	0.1
True	King size, filter	5	0.4
True	King size, filter, menthol	6	0.4
Pall Mall Extra Mild	King Size, filter (hard pack)	7	0.6
King Sano	King size, filter, menthol	7	0.3
King Sano	King size, filter	7	0.4
Merit	King size, filter	8	0.5
Tempo	King size, filter	8	0.6
Merit	King size, filter, menthol	8	0.5
Iceberg 100's	100 mm, filter, menthol	9	0.6
Kent Golden Lights	King size, filter	9	0.7
Lucky 100's	100 mm, filter	9	0.6
Lucky Ten	King size, filter	9	0.6
Pall Mall Extra Mild	King size, filter	10	0.7
Benson & Hedges	Reg. size, filter (hard pack)	10	0.6
Vello	King size, filter, menthol	10	0.7
Vantage	King size, filter	10	0.7
Vello	King size, filter	11	0.7
Vantage	King size, filter, menthol	11	0.7
Multifilter	King size, filter, menthol	11	0.7
Doral	King size, filter, menthol	11	0.8
Salem Lights	King size, filter, menthol	11	0.8
Doral	King size, filter	13	0.9
Multifilter	King size, filter	13	0.8
Marlboro Lights	King size, filter	13	0.8
True 100's	100 mm, filter, menthol	13	0.8
Fact	King size, filter, menthol	13	0.9
Winston Lights	King size, filter	13	0.9
True 100's	100 mm, filter	13	0.8
Raleigh Extra Mild	King size, filter	14	1.0
Viceroy Extra Mild	King size, filter	14	1.0
Kool Milds	King size, filter, menthol	14	0.9
Marlboro	King size, filter, menthol	14	0.8
Eve	120 mm, filter (hard pack)	14	1.0
Marlboro	King size, filter, menthol (hard pack)	14	0.7
Fact	King size, filter	14	1.0
Eve	120 mm, filter, menthol (hard pack)	15	1.0
Parliament	King size, filter (hard pack)	15	0.8
Belair	King size, filter, menthol	15	1.0
Miyako	King size, filter	15	0.9
Alpine	King size, filter, menthol	15	0.8
Parliament	King size, filter	15	0.8
Virginia Slims	120 mm, filter, menthol (hard pack)	15	1.0
Long Johns	120 mm, filter, menthol	15	1.2
Vanguard	King size, filter	15	1.0

*Report of "Tar" and Nicotine Content of the Smoke of 169 Varieties of Cigarettes, Federal Trade Commission, November 1976. (For a copy, write to Division of Legal and Public Records, Federal Trade Commission, Pennsylvania Ave. at Sixth St., Washington, DC 20580.)

Workmen's Compensation: The Doctor and the Patients

The patient is the only reason for our existence as doctors. Doctors are complicated individuals; patients are equally complicated. Third party involvement further complicates management of the patient. In particular, the Workmen's Compensation patient demands an extra dimension.

Our Workmen's Compensation laws are really the oldest of our social justice programs. The cost to employers boggles the imagination. The benefits to the workers have spiraled to the point that defies statistics.

The spin-off here is the livelihood for thousands of lawyers, doctors, insurance officials, brokers, safety engineers, and others. Yet, it is handled in the private sector without bureaucratic padding and is a true and tried buffer against the socialistic state. This point is overlooked by most of us. It is of interest that the Social Security system is handled so politically that almost 50 years of experience with Workmen's Compensation was ignored. Basically the dreams of the founders of Workmen's Compensation were realized.

But something happened here. The man who by his own choice sought work and obtained work from an employer was hired by the employer who did not have to hire him. No one forced anyone. Should this man be injured, and the law is followed with compensation for physical impairment, all would be well. Somehow, the interpretation was changed. A talented attorney can make much of the education of the man after he is injured. Of course, this is the same education level from which he was hired. But the employer is somehow held liable for additional percentage of impairment because the man has a minimal education. Should the man come from a wounded social structure, a greater percentage is added to the impairment. Here again, that was the same

social structure from which he was hired, but the employer is penalized. Actually, he is penalized for hiring the man. Should the man have prior injury, a greater percentage is added. Much of this is due to the overly sympathetic doctor, judge, jury, or attorney. This would be all right if the sympathetic people would pay the difference from their own pockets. The generous awards are paid for by the consumer who purchases the product of the employer. The recipient of such an award should throw a block party for his neighbors. The neighbors are paying the award indirectly by added cost of the product.

The compensation adjuster is actually in the trenches of the private sector. These men are the defense against the state takeover. The adjuster must at all times treat the injured worker with all the dignity of man. He must do his homework with the safety director and plant nurse. He must recognize that the investigation he conducts can be of much benefit, both to employer and employee, to bring a fair shake to all concerned. The management people, labor leaders and the justice that I have known, all seek a fair shake for everyone so apparently there is no conflict at that particular level when it is kept at that particular level.

So, although the Workmen's Compensation Act has been partially dismantled, and our shrinking manpower pool increases the challenge to the embattled private sector, the basic laws are still effective.

The current climate puts a high priority on self-gratification rather than on the will to work. This priority on "each to do his thing" is aided and abetted by the civil libertarians. These theorists are painfully selective of the civil liberties they espouse. This climate, however, does little to

encourage the thing that made America great, i.e., the work ethic.

It is incumbent upon the doctor then to treat the Workmen's Compensation patient with the same courtesy, professional care, and concern as patients without third party interest. The doctor should give the carrier the same detailed complete information that he would send to another doctor. Above all, the doctor should seek clarity in all of his reports to the adjuster.

A better understanding of the Workmen's Compensation laws and working in the spirit of these laws should do much to bring greater harmony between employee and employer as well as between doctors themselves working in the medical community.

Joseph G. Burd, M.D.
313 Mid-State Medical Center
Nashville, TN 37203

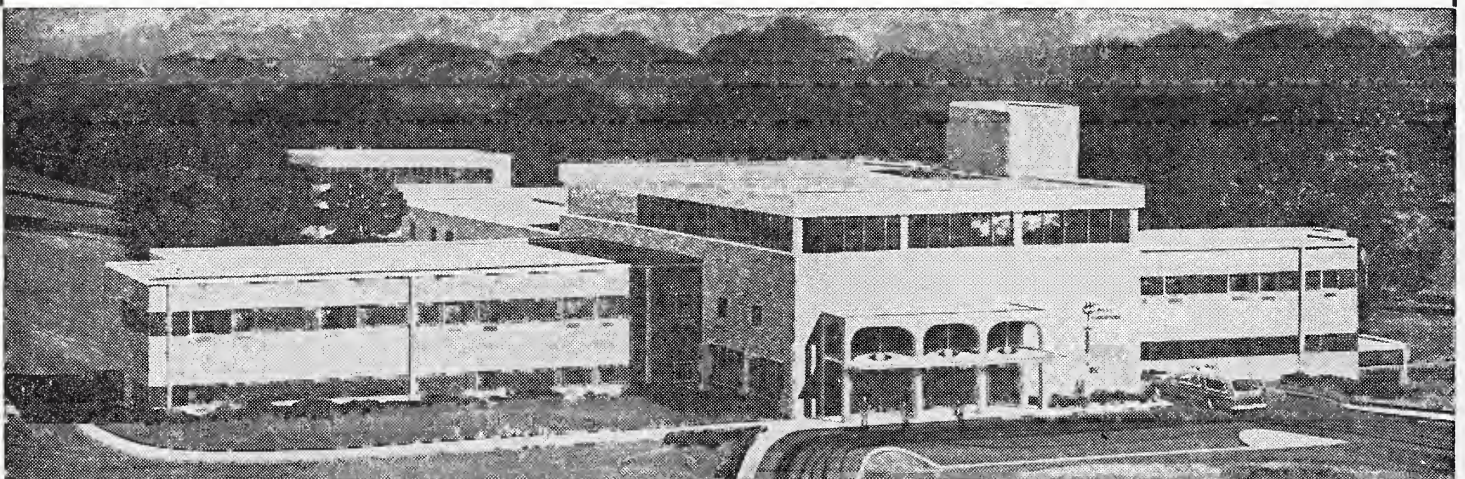
The supremacy of the nation and its laws should be no longer a subject of debate. That discussion, which for half a century threatened the existence of the Union, was closed at last in the high court of war by a decree from which there is no appeal—that the Constitution and the laws made in pursuance thereof are and shall continue to be the supreme law of the land, binding alike upon the States and the people. This decree does not disturb the autonomy of the States nor interfere with any of their necessary rights of local self-government, but it does fix and establish the permanent supremacy of the Union. The will of the nation, speaking with the voice of battle and through the amended Constitution, has fulfilled the great promise of 1776 by proclaiming "liberty throughout the land to all the inhabitants thereof."

James A. Garfield
INAUGURAL ADDRESS
MARCH 4, 1881

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DAVID H. TURNER

Socialized Medicine

National Health Insurance

Comprehensive Health Insurance

**president's
page**

The subject of this month's page is so broad and extensive that many millions of words have been written on it. I want only to present a few facts and basic principles.

The AFL-CIO is sponsoring a bill in Congress at this time called the Health Security Act. It is S. 3 introduced by Senator Kennedy and H.R. 21 introduced by Representative Corman. This bill, if it should become law, would totally restructure the system of health care delivery in the United States. It would be totally *administered and financed by the federal government*, through new Social Security taxes and general revenues. All health services would be furnished by practitioners, institutions, and others *under contract with the federal government*. There would be comprehensive benefits and no co-payment. This would be *socialized medicine*.

The TMA in the House of Delegates last April and the AMA in its House of Delegates last June passed resolutions expressing "total opposition to the nationalization of the medical profession."

The AMA has developed a set of 17 principles dealing with health care legislation. The TMA House of Delegates in April adopted these 17 principles in a resolution.

The AMA is sponsoring a bill in Congress based on these 17 principles. It is called the Comprehensive Health Care Insurance Act of 1977 and has been introduced as H.R. 1818 by Representatives Carter, Duncan and Murphy; and as S. 218 by Senator Hansen. This bill if it should become law would provide full coverage for all through *private insurance*. Employment-based insurance would be paid for by the employer and employee. There would be continuing insurance for the temporarily unemployed and income related premium subsidy on insurance for the nonemployed and self-employed. This would be *comprehensive health insurance*.

President Carter has stated that his administration is preparing and will soon introduce his bill for national health insurance. We may anticipate that the administration bill will closely resemble the Kennedy-Corman bill which is sponsored by the AFL-CIO.

The Sickness Insurance Law became operative in Germany in 1884 and since that time all industrialized nations have developed means whereby the cost of being sick can be spread out either by government paying for medical care or by the principle of private insurance. Great Britain, Sweden, Germany, and the Soviet Union have gone the route of socialized medicine while the United States and Australia have maintained a voluntary private insurance base for paying for health care. The foregoing are facts; now for some basic principles.

Whatever health care legislation is passed into law, whether it be next year or at some subsequent time, we must strive to preserve certain basic principles or we will have socialized medicine regardless of what it may be called:

1. The private insurance principle must be maintained.
2. The physician must not be employed by the government.
3. The physician must not be under contract to the government.
4. The provision for the development of a large bureaucracy must be avoided.
5. Government control of practitioners and institutions must be avoided in order to prevent the development of a large bureaucracy.
6. The patient must be permitted to choose any physician he desires.
7. The physician must retain the privilege of not being required to serve a patient he does not want to treat.
8. The emphasis of the medical profession must be on quality medical care and not cost control.
9. The patient must pay directly some of the cost for each medical service, and some portion of the health insurance premium or rationing of services will become necessary.
10. Private practice on the traditional "fee-for-service basis" must be maintained.
11. The insurance contract must be between the patient and the insurance company so that the physi-

Continued on page 767

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OCTOBER, 1977

editorials

Of Cabbages and Kings

In spite of disclaimers to the contrary, it rapidly became clear to any who inspected early PSRO proposals at all closely that the nearly hidden utilization review tail was intended to wag the dog. Great efforts were made to hide this by saying proper control of hospital utilization is in itself one of the best ways to insure high quality medical care.

All that was in the days of a less forthright administration. Regardless of whatever else you can say about Mr. Carter's administration, for better or for worse it has discarded all sham and his admitted economy in health care (used synonymously with medical care) is the prime consideration. Quality of care is scarcely mentioned. An item in today's newspaper quotes Mr. Secretary Califano as saying the cost of health care is increasing at the rate of \$1 million an hour, and that the proposed administration "lid" needs to be clapped quickly onto allowable cost increases or it will bankrupt the country—all of which may or may not be so, as Mr. Califano has a busy mouth which sometimes appears dissociated from his intellect. Actually, if he reads *Newsweek*, he would know that while the cost of medical care was increasing 52% since 1970, food was going up 57%, a college education 70%, and housing 80%. But medicine is his thing, and anyhow, it's easier to get a handle on.

In any case, the report of the Congressional Budget Office (CBO) on health spending, reported on in the National News section of this issue of the JOURNAL, makes some interesting comments. The CBO's reading of the situation is that present cost containment proposals do not go far enough, that "they will have little effect on the upward trend in health expenditures. . . ."

Remember when, in the interest of improved quality of care, the feds were pushing for more medical schools and bigger classes, were heavily subsidizing the school and students, and were opening the doors to any and all "FMGs"? Not anymore! Remember how they were saying the AMA was acting in restraint of trade, violating the Sherman Antitrust Act, by limiting the number of doctors? Well, now the situation is reversed. The CBO says we actually need fewer doctors because doctors are what cost money—not necessarily because of what they charge, but because they are the users of health services and supplies, which cost money. What they don't say is that the recipients of the services and supplies are patients, who, at least in the vast majority of instances, need them, and that to withhold them is to lower the quality of medical care.

The CBO speaks of the likely ultimate necessity for significantly reorganizing the health care delivery system. Although they don't say so, what is implied is a nationalized medical service, such as Britain has. There are at least several in the Congress, among them Senator Kennedy, who

apparently are in love with that system. If nothing in our publication plans goes awry, we will take a close look next month at nationalized medicine in other countries through the eyes of some who have been there. While it may have some appeal for Senator Kennedy, as our contributors see it, that system leaves a lot—a whole lot—to be desired.

In this issue of the JOURNAL we have dealt at some length with the modern treatment of coronary artery insufficiency. It is expensive. In prior years many of those patients would have died and many more would have become cardiac cripples. Some, of course, would have survived to live normal lives. But those lost to productive life would have constituted a drain on the gross national product, and salvage of these individuals reverses that flow. It also saves lives, and, in spite of Mr. Califano's preoccupation with money, that means a lot—to the patients, to their loved ones and friends, to the beneficiaries of their labor, and to their doctors, if not to the Secretary for Health, Education and Welfare.

In the New Order, the availability of coronary artery bypass surgery will likely still be subject to restrictions. They will be similar, but they will be different. Now the procedure is available to those who have money—theirs or that of third-party payers. Under nationalized medicine it will be available to those with power.

J.B.T.

The Young Folks At Home

Watching our 5-year-old granddaughter playing house among the bushes in our backyard reminded me of some things long forgotten. She went in and out of rooms ceiled with boughs, floored with leaves and pine needles, and walled with a few sticks laid on the ground. Her rooms were spacious—to her—and she went happily about cooking for her dolly, cleaning up, and doing the things she watches her mother do—things mothers have done since the creation of Isshah.

"Don't go through there, Granddaddy—that's a wall." I should have known. Too bad to tear it all up, but grass has to be cut, and sticks picked up. She'll build it all back next visit—or more likely, a new one, somewhere else.

The house where I grew up still stands on the east brow of Lookout Mountain. When I was little, a trolley ran in front of it, but the trolley was replaced by buses, and for several years the

car-track was deserted. It was the shortest route between our house and the school—about half a mile—and I walked it both ways most days. There were woods on both sides, and it soon got overgrown with trees and bushes. One side had a low bluff, with a wet weather spring and a small pool. It was a great place for looking for little animals, bugs, flowers, and all the things small boys treasure—not to mention for playing cowboy and Indian.

"They" finally made a paved road out of the car-track, houses sprang up where the woods used to be, and the whole place became "civilized." I was gone by then, but on our visits to "the mountain" our children played in the bushes in their "Pappa's and Granny's" front yard along the once-upon-a-time car-track. Our own yard is about a third almost-woods, and until our youngest was in high school, we had an acre or so of real woods touching it. So they also learned the joys of the woods.

Our children had some woods to play in, though not as much as I did. As I grew older, I had the slopes of Lookout Mountain, which are now a part of the Chickamauga-Lookout Mountain National Monument. Then they were just woods to play in and bluffs to climb on. I spent days on end, summer and winter, in them. During the depression of the early '30s the CCC (Civilian Conservation Corps) built trails there and sometimes I rode a neighbor's horse along them. I walked them in sunlight when the laurel and rhododendron were in bloom, walked them in driving rain and drifting snow. I have watched the bluffs become waterfalls, and have seen the cascading water become ice. I have watched green leaves turn to red and gold, then brown. I have seen the pines and hemlocks bend and crack under the weight of frozen fog. I have only to close my eyes to relive it. The images are sharp and clear.

Our children, too, have watched the seasons change in the woods, played in the drip of water-heavy boughs, and run almost knee-deep through snow covered leaves.

Our granddaughter lives in a nice house in Indianapolis. Last winter we played in the snow in her yard. To her it was deep snow in a big yard. It was really ten inches of snow in a small yard. But it is a yard, and it is hers.

A few years ago we (my wife and I and our children) were driving into New York City from Cape Cod by way of Tanglewood and along the

Taconic State Parkway. Construction on the maze of freeways landed us in the upper East Side beneath the Third Avenue El somewhere around 120th Street. We drove south under the El for what seemed like hours before we got to the cross-Bronx expressway and out. There were children everywhere. Their "yard" was the sidewalks and streets. It was a good education for our children. Shades of *West Side Story*!

For most of man's history he has left rural life for the cities to gain the advantages they offer. As the cities grew, parks were built—green jewels in the concrete jungles. Mobility reversed the trend, and those who could, fled to green suburbia, leaving the cities to die, the heritage of those for one reason or another immobilized. Too often, parks have been early casualties of central city poverty, and so the children grow up with a potted plant or so—if they're lucky.

Nor does the rape of the green stop there. Thanks to a few men of vision like John Muir and Theodore Roosevelt, to name two, a national park system was established less than a century ago as our frontiers reached the oceans, placing a finite limit on our resources. The quest for the dollar is slowly eroding this treasure. The watchword is "Clear it and pave it." In a sense it is easy to sympathize with the Alaskan loggers, who shout that the Alaskan forests mean jobs for themselves and food for their children. Or with the strip-miners in the Tennessee mountains. . . .

But I keep thinking of my granddaughter's "big" little yard, and the joy it brings her. And then I see those children beneath the Third Avenue El. . . .

J.B.T.

Eat, Smoke, and Be Merry . . .

If It Feels Good—Do It
(Bumper Sticker)

A handsome, tanned, healthy, young man smiles at you from countless magazines. He allows as how, "I don't let anything get in the way of my enjoyment. So when I'm smoking, I head straight for Coffin Nails. There's nothing half-way about it. I get extra length and smooth flavor. Coffin Nails—*that's* my enjoyment."

See the man. See the smiling young man. See him enjoying himself. He obviously subscribes to the sentiment expressed on the bumper sticker. But then again, maybe what he's smiling about is the bundle he gets for smiling about what the

ad says he's smiling about. Maybe *that's* his enjoyment.

Below his ecstatic mouthings it says, "Warning: The Surgeon-General Has Determined That Cigarette Smoking Is Dangerous To Your Health." Then the ad prates that each Coffin Nail, as reported by the FTC in December, 1976, has only 18 mg of "tar" and 1.2 mg of nicotine.

See the man. See the man cough. See him hack his little lungs up. See him claw at his ulcer. See him get his angiogram. A pretty low level of fulfillment, I'd say.

In 1977, 7,200 Tennesseans will die of cancer, for a cancer death rate of 168 per 100,000 population. Of these, 1,900, or slightly over a quarter, will die of lung cancer; this is followed by 750 from colon and rectum cancer, 600 from cancer of the breast, 425 prostate, and, thanks to a considerable extent to Pap smears, only 225 from cancer of the uterus and cervix. Lung cancer deaths for the United States will be 89,000, out of a total of 385,000 deaths from cancer of all sites.

Now it would be foolish to insist, in this day of gross pollution of the atmosphere by all sorts of noxious substances, that this epidemic of lung cancer can all be attributed to cigarette smoking. But the fact remains that for smokers the bulk of their pulmonary carcinogens comes from those little "coffin nails" they love so well.

Nor is cancer the only health problem caused by tobacco smoke. Chronic irritation produces chronic cough, which combined with direct damage to the elastic tissue of the lungs leads to emphysema, a fate worse than death. Nicotine produces vasomotor instability and vasospasm, which can among other things lead to myocardial ischemia. There is evidence that mothers smoking cigarettes in the last two trimesters of pregnancy tend to have babies with lower average birth weight than nonsmoking mothers, that they have a higher risk of having a stillborn child, and that their infants have a higher fetal and neonatal death rate. Most recently, Daniell, in an article in the *Archives of Internal Medicine* (136:298-304, 1976) pointed out that almost all women with symptomatic postmenopausal osteoporosis are heavy smokers.

It is estimated that 250,000 Americans die each year from coronary artery disease, emphysema, cancer of the larynx, pharynx, pancreas, and bladder disorders directly attributable to excessive cigarette smoking. While the federal

government was spending \$22 per lung cancer death to educate the public on the dangers of smoking, the tobacco industry was spending \$3,600 per death promoting it—a total of \$320 million.

In 1975, the tobacco industry sold 601 billion cigarettes, amounting to 2,861 for every man, woman and child in the United States. In 1976, it sold 670 billion, over 3,000 for every person in the United States. Less than 12% of the cigarettes sold was of a low tar, low nicotine variety. In view of this alarming trend, the American Cancer Society created a National Commission on Smoking and Public Policy to assess current antismoking activities and to recommend possible new approaches. The commission comprises a stellar array of public figures, both medical and lay, among them our own Benjamin F. Byrd, Jr., M.D., immediate past president of the American Cancer Society.

At the same time, the ACS embarked on a five-year program to reduce smoking among adults by 25% (12.5 million) and among teenagers by 50% (4.5 million); to reduce the tar and nicotine content in cigarettes by 50%; and to work to phase out government subsidy of tobacco growing.

As a part of this Target 5 Campaign, November 17 has been declared the *Great American Smokeout* by the ACS. Its purpose is to induce millions of smokers to sign a pledge on that day, and the ACS will inform smokers of ways to quit.

As “objective evidence” against all this “emotion” on the part of the ACS and the federal government, the tobacco industry likes to point out that a 30% reduction in the number of smokers would lose the tobacco industry \$3 billion in sales, the federal government $\$3\frac{3}{4}$ billion and state governments over \$1 billion in cigarette excise tax revenues, tobacco farmers $\$3\frac{3}{4}$ billion in cash receipts and their suppliers \$200 million in sales, and merchants selling consumer goods and services over \$300 million in sales. They ask the question as to whether or not the ACS has taken a “reasoned approach to what is a legal product produced and distributed by ethical, legitimate businessmen and women?”

The answer to that, I guess, would have to be, “Well, what are 90,000 lung cancer deaths a year worth?”

Epidemiologic studies indicate that smoking a low tar/nicotine cigarette can offer some protec-

tion, so that you will do those who *can't* quit a favor by urging them not to fight, but switch. But I quit, and if I could, anybody can. In any case, we reproduce on page 752 the FTC listing showing nicotine and tar content of low tar cigarettes. The entire list is available from the FTC.

A tobacco industry spokesman has made the statement that the ACS is playing on emotions, capitalizing on the public's fear of cancer, and not using scientifically derived, objective evidence.

“I don't let anything get in the way of my enjoyment” is objective?
J.B.T



Lacrimal Scan

To the Editor:

In the interest of accuracy of terminology, the article by Drs. Bell and Henderson (August, 1977, *Journal of the Tennessee Medical Association*, p. 576) deserves comment. It is not the lacrimal gland, but the lacrimal drainage apparatus (lacrimal sac, nasolacrimal duct, etc.) which is imaged in the technetium scan.

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Clarksville, TN 37040

Correction

To the Editor:

(Letter on the Natural Death Act, August 1977.)
A typographical error of one word (paragraph 4) could, if taken out of the context as a whole, suggest I had stopped tube-feeding. The original copy of the letter read, “I were a fool,” and not “was.”

R. H. Kampmeier, M.D.
Vanderbilt University
School of Medicine
Nashville, TN 37232



Harry S. Abram, age 46. Died September 3, 1977. Graduate of University of Virginia School of Medicine. Member of Nashville Academy of Medicine.

John C. Burch, age 77. Died August 27, 1977. Graduate of Vanderbilt University School of Medicine. Member of Knox County Medical Society.

E. L. Caudill, Sr., age 86. Died September 3, 1977. Graduate of Medical College of Virginia. Member of Washington-Carter-Unicoi County Medical Association.

Jack R. Holifield, age 54. Died August 15, 1977. Graduate of University of Tennessee School of Medicine. Member of Northwest Academy of Medicine.

John A. McIntosh, age 91. Died August 8, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

George A. Mitchell, age 59. Died September 5, 1977. Graduate of Harvard Medical School. Member of Chattanooga & Hamilton County Medical Society.

John R. Olson, age 63. Died August 23, 1977. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

Henry Gordon Rudner, Sr., age 83. Died September 4, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

William K. Vance, age 87. Died August 10, 1977. Graduate of University of Virginia School of Medicine. Member of Sullivan-Johnson County Medical Society.

David H. Waterman, age 69. Died August 21, 1977. Graduate of University of Nebraska Medical School. Member of Knox County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA & HAMILTON COUNTY MEDICAL SOCIETY

Coleman L. Arnold, M.D., Chattanooga
Michael I. Bonder, M.D., Chattanooga
Morrow Chamberlain, II, M.D., Chattanooga
Hytham A. Kadrie, M.D., Chattanooga
Roger R. McFadden, M.D., Chattanooga
Elmer W. McKenzie, Jr., M.D., Rossville, GA
Andrew B. Rittenberry, Jr., M.D., Chattanooga
Banchob Utadej, M.D., Chattanooga

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Elbert G. Richardson, M.D., Memphis

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Richard W. Quisling, M.D., Nashville
Ronald L. Steenerson, M.D., Nashville

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SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

Jeffrey Robbins, M.D., Bristol

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL ASSOCIATION

Paul E. Brown, Jr., M.D., Johnson City

WILSON COUNTY MEDICAL SOCIETY

Major Kenneth C. Dozier, M.D., Oxon, MD
George C. Martin, M.D., Lebanon

personal news

David L. Greene, M.D., Morristown, has been elected chief of staff at Doctors Hospital. Also elected were *David Willbanks, M.D.*, vice chief of staff; and *David McNeil, M.D.*, secretary of the medical staff, both of Morristown.

Robert E. McCown, M.D., Fayetteville, who recently ended a 51-year practice, and *J. V. McRady, M.D.*, Fayetteville, who practiced for 41 years, were honored at the Lincoln County Fair during "Doctors Night" ceremonies.

William G. Shull, M.D., Whitwell, has been named the 1977 "Boss of the Year" by the Sequatchie Valley Chapter of the American Business Women's Association.

programs and news of medical societies

Nashville Academy of Medicine

Tel-Med Now Midstate—Tel Med is currently available to 1.4 million people in the 40-county Middle Tennessee area. The expansion of Tel-Med became effective in late August with the installation of a new 15-channel phone system with three In-Wats lines. The program offers 300 physician-screened taped messages on a wide range of health topics including a special hypertension information program provided by the TDPH Chronic Disease Prevention Division. New Tel-Med brochures will be disseminated to the midstate populous via physicians' offices, hospitals, pharmacies, and banks. Sponsored by the Academy, other interested county medical societies, and the Metro Health Department, Tel-Med is operative 9 am to 9 pm, Monday through Friday, and 10 am to 6 pm on Saturday.

From the AMA's Office in Washington, D.C.

Health Legislation

Congress was moving to wrap up work on as much health legislation as possible in preparation for the gathering storm over national health insurance (NHI) in 1978.

The administration was putting strong pressures on senators and representatives to move quickly on President Carter's proposal for a "cap" on allowable hospital revenue increases, insisting that the cost containment plan was a prerequisite for NHI.

Despite the sense of urgency imparted by the administration, it appeared that jurisdictional problems, a cooling-off by organized labor on the plan, and stiff opposition from hospital and physician groups, would serve to carry the issue over until next year.

The administration was keeping mum about the form its NHI program will take. Task forces of planners were busy at HEW drafting various approaches. About the only certainty at this stage is that the Carter NHI bill will call for implementation in stages to avoid a crushing financial burden on the federal treasury.

Few expect Congress can do more next year than take a good look at NHI. The awkward jurisdictional tangle in Congress, where two committees in both House and Senate must share jurisdiction, makes for delay. With lawmakers anxious to get the session over with quickly so they can campaign for the 1978 elections, only the most sanguine NHI proponents predict final congressional action next year.

Analyzing the NHI situation for the benefit of Congress, the Congressional Budget Office (CBO) issued a report warning that: "If strategies to contain health expenditures are not adopted soon, the possibility of enacting a comprehensive national health insurance program may be adversely affected."

In addition to the Hospital Cost plan, Congress in the final weeks of the 1977 session was faced with numerous other health issues. Among the measures hanging fire were the Health, Education and Welfare Department appropriation, which had been stalled over the abortion issue; new federal regulations for clinical laboratories; Medicare-Medicaid fraud and abuse; federal aid for rural health clinic physician extenders; the administration's plan for expanding the child health program; and an omnibus drug bill making many changes in Food and Drug Administration (FDA) operations and regulations, including new labelling language.

Some of these bills were fated to remain lodged in Congress until 1978. The only sure bet for passage in 1977 was the appropriations bill which gives HEW several billion dollars more than President Carter recommended and continues to bar federal Medicaid payments for most abortions.

Other major health bills before Congress included an 18-month delay in the proposed FDA ban on saccharin; amending the renal disease program to encourage self-dialysis and kidney transplants; establishing a separate department of health; and freeing federal scholarship stipends from income tax.

CBO Report on Cost Containment

The gloomy report by the Congressional Budget Office (CBO) on health spending advised House and Senate Budget Committees that current control efforts "will apparently have little effect on the upward trend in health expenditures. . . ."

The report said existing reimbursement, facility, and utilization containment programs can be altered by increasing or decreasing the level of regulation. "Changes must be made in hospital reimbursement practices if some immediate impact on hospital expenditures is to occur," the report said.

According to the CBO, "A successful program, whether administered at the state or federal level, would have to break the automatic cost-increase/revenue-increase relationship that is currently enjoyed by individual hospitals. Certificate-of-need programs could be strengthened through increased financial support for the state agencies, more precise federal guidelines, and perhaps limits on capital spending. The cost-effectiveness of PSROs might be improved by restricting utilization review to more questionable medical practices or by emphasizing preadmission review."

The way the CBO sees it, "The expansion of regulatory efforts is an attempt to compensate for the overutilization of health care and the failure of high costs to lessen demand. Appropriate changes in the underlying supply and demand factors could reduce the need for hospital regulation. Moreover, because these supply and demand factors operate throughout the entire health sector, successful containment of hospital expenditures might accelerate nonhospital expenditures. Increases in patients' out-of-pocket costs or limits on physicians' fees might, however, increase price-consciousness related to non-hospital care."

The report continued: "Federal regulatory efforts to contain the supply of resources have concentrated on beds and facilities, virtually disregarding manpower and technology. While prospective reimbursement and utilization control programs can be strengthened and thereby reduce health expenditures, their effectiveness may be limited without national health insurance, because of the number of third-party payers and the variation in their payment procedures. Supply policies, however, might be quite effective without national health insurance. (Countries with national health insurance plans are relying increasingly on constraints in supply to contain health expenditures.)"

Future growth in the number of physicians could be reduced, particularly by restricting the influx of foreign medical graduates, CBO said, adding: "Because each additional practicing physician generates

expenditures for both hospital and physician care far beyond the level of his net income, strategies to reduce the impact of each physician on total expenditures could be considered. Altering reimbursement schedules and increasing the proportion of physicians in primary care and in prepaid health plans are possible strategies."

Present reimbursement, facility, and utilization containment programs directed at hospitals could be changed by strategies which represent incremental change, stronger regulation, or weaker regulation, said CBO. "A strategy of reducing regulation would result from the belief that either a more competitive health-care market or greater price-consciousness would be more effective in containing costs."

The report conceded that "because of limited knowledge, it is not possible to predict accurately the cost savings or increased costs resulting from increases or decreases in regulatory efforts."

The report concluded: "Under current policies, health expenditures will continue to absorb a larger proportion of the nation's resources and of the federal budget. These trends could be slowed down significantly by increased regulation similar to that recently proposed by President Carter to contain future hospital revenues and investments. Increased cost-sharing by patients, or a significant reorganization of the health-care delivery system are other alternatives. If strategies to contain health expenditures are not adopted soon, the possibility of enacting a comprehensive national health insurance program may be adversely affected. Moreover, a long delay is likely to produce even more severe proposals for containing health expenditures—proposals that are likely to freeze prevailing health expenditure patterns."

Report on Drug Regulation

In an 8,800 word critique, the Pharmaceutical Manufacturers Association (PMA) characterized the Final Report of the HEW Review Panel on New Drug Regulation as a "philosophical endorsement of corrosive regulation" that would create "impediments to the efficiency of the new drug approval process."

Though commending some specific recommendations and comments, including the conclusion that the FDA is neither pro- nor anti-industry, PMA President C. Joseph Stetler says the panel "consistently slides into the trap of statutory and regulatory solutions."

"Thus we come to a stunning statistic," the PMA covering letter to the critique reads. "All told, the panel makes some 90 recommendations, many of them calling for new increments of regulation—without one mention of any withdrawal or lessening of agency power. While many of these suggestions are procedural in nature, cumulatively and inevitably, they would change our national policy toward drug research and drug products. In our view, that change would unquestionably be for the

worse in the form of more cumbersome, costly and slower processes."

PMA said the panel displays "insufficient understanding of the real world of science," that it leans "toward an adversarial rather than a cooperative philosophy for FDA-industry relationships," and that it ignores the "innovative capabilities," of the American pharmaceutical and device industry, with its more than a billion dollars a year research effort.

"At some point, regulatory demands can become so strict that government will have erected formidable barriers to competitive entry and only the larger and best-equipped firms can continue in the race. In the process, useful new drugs will be lost or delayed and the cost of those still available will be inflated. Government then will have created more concentration in an industry where both price and product competition have been intense, with the benefits flowing ultimately to the consumer," PMA asserted.

PMA charged that in perception of the "drug lag," the panel "manifests further disinterest in the industry's R & D (research) challenges." The critique lists more than a score of important drugs "now accepted as safe and effective in the United States, which went on the market overseas two or more years ahead of United States introduction. The cost of these delays to American patients, in human terms alone, is incalculable."

HMO'S Being Oversold

The American public has been getting "a superficial sales pitch" on the worth of Health Maintenance Organizations (HMOs), according to a study by the American Medical Association.

The report dealt with important aspects of the HMO business that government reports, favorable to HMOs, "usually fail to reveal," said the AMA.

The Carter administration pledged a renewed effort to expand HMOs and strengthen the federal aid program. But the review by the AMA raised questions about some widened public assumptions about HMOs and claims made in their behalf.

Advocates of HMOs have claimed that HMOs place a special emphasis on preventive care, "but recent studies indicate that fee-for-service practitioners provide *more* preventive care than do HMOs," said the AMA report.

Much of the "efficiency" of HMOs "appears to be attributable to (1) skimming, in which HMOs attempt to draw their enrollment from the healthier segments of the population, and (2) skimping, in which utilization of covered services is not encouraged."

According to the report, "There is no clear indication that unit costs (the cost to provide a given item of medical care) are lower in an HMO. However, premiums for HMO-type plans tend to be about 25% higher than those for conventional health insurance."

Recent amendments by Congress to the HMO Act will reduce the benefits an HMO must provide; legitimize "skimming," by eliminating the

open enrollment provision; allow HMOs to charge higher-risk enrollees a higher premium; dilute the "one stop" medical care concept that formerly was the keystone of the HMO, said the report.

Continued the AMA report: "Some tactics of dubious legitimacy have been employed, both to 'sell' the HMO concept to the American people and to enroll individuals in HMOs."

"Everything considered, it seems clear that the American public has been overpromised, where HMOs are concerned. Where an HMO holds costs down, it is apt to be due to reduced utilization and not to health 'maintenance.'"

announcements

CALENDAR OF MEETINGS

NATIONAL 1977

- | | |
|--------------------|--|
| Oct. 30-
Nov. 3 | American College of Chest Physicians,
MGM Grand Hotel, Las Vegas |
| Oct. 30-
Nov. 3 | AMA Regional Meeting, Honolulu |
| Oct. 31-
Nov. 3 | Interstate Postgraduate Medical Association,
Diplomat Hotel, Hollywood, Florida |
| Nov. 1-2 | American Association for the Study of
Liver Diseases, Hyatt Regency Hotel,
Chicago |
| Nov. 3-5 | Southern Thoracic Surgical Association,
Marco Beach, Marco Island, Florida |
| Nov. 5-10 | American Academy of Pediatrics, New
York Hilton and Americana Hotel,
New York |
| Nov. 6-9 | Southern Medical Association, Fair-
mont Hotel, Dallas |

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| Nov. 8-10 | American College of Emergency Phy-
sicians, Hilton, St. Francis, and Hyatt
Union Square Hotels, San Francisco |
| Nov. 9-13 | American Association for Clinical Im-
munology and Allergy, Fairmont Hotel,
New Orleans |
| Nov. 11-13 | Association of Clinical Scientists, Drake
Hotel, Chicago |
| Nov. 11-16 | American Association of Blood Banks,
Atlanta Hilton, Atlanta |
| Nov. 28-
Dec. 1 | American Heart Association, Fontaine-
bleau Hotel, Miami Beach |
| Nov. 29-
Dec. 4 | International College of Surgeons (U.S.
Section), Fairmont and Roosevelt Ho-
tels, New Orleans |
| Nov. 30-
Dec. 3 | American Medical Women's Associ-
ation, Marriott Hotel, Denver |
| Dec. 3-8 | American Academy of Dermatology,
Convention Center, Dallas |
| Dec. 4-7 | AMA House of Delegates Interim
Meeting, Palmer House, Chicago |
| Dec. 5-7 | Southern Surgical Association, The
Homestead, Hot Springs, Virginia |
| Dec. 7-11 | American Medical Tennis Association,
The Smoke Tree Ranch, Palm Springs,
California |
| Dec. 10-13 | AMA Winter Scientific Meeting, Fon-
tainebleau Hotel, Miami Beach |
| Dec. 14-17 | West Coast Allergy Society, Camelback
Inn, Scottsdale, Arizona |

STATE

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|----------|--|
| Nov. 2-4 | Tennessee Academy of Family Physi-
cians, River Terrace and Civic Audito-
rium, Gatlinburg |
|----------|--|

President's Page . . .

Continued from page 759

- cian is responsible to the patient and the patient is responsible to pay the physician for his services.
12. The physician must not be required to take an assignment, for this then removes the patient from his responsibility.
13. Some key words, whose meaning may vary with the interpreter, that should be avoided in discussing legislation dealing with health care insurance are nationalized, state-controlled, bureaucratic, compulsory, mandatory, and standardized.
14. Federal government funds should not be involved except as direct subsidy to the individual poor for premium payment.

Compulsory health insurance for the entire population can easily lead to a complete system of socialized medicine and it would make no difference whether the payment made by each family is called a premium or a tax. The real basic issue is—government-controlled medicine or free nonsocialized private practice of medicine.

Sincerely,

David H. Turner, M.D.

PRESIDENT

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D. David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergeant, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1977-78

Nov. 1-5	6th Annual Rhamy-Shelley Lectures (16 hours)
Nov. 18	B. H. Robbins Memorial Lecture (anesthesiology) (7 hours)
Dec. 2-3	What's New in Obstetrics for Physicians? (10 hours)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
March 22-24	Clinical Endocrinology (21 hours)
Spring, 1978	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
Spring, 1978	Annual Barney Brooks Lectureship in Surgery (1 hour)
Spring, 1978	Annual L. W. Edwards Memorial Lecture (1 hour)
April, 1978	Annual Frank E. Luton Lecture in Psychiatry (1 hour)
May, 1978	Postgraduate Course in Allergy
May, 1978	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)

- May 24-25 17th Annual Seminar in Psychiatry,
for Non-Psychiatrists (11 hours)
- July 6-9 Contemporary Clinical Neurology (16
hours)

For information contact: Vanderbilt Continuing
Education, 305 Medical Arts Building, Nashville,
TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1977-78

- Nov. 2-3 The Use of Staplers in Surgery (Work-
shop)—Chattanooga
- Nov. 10-12 Diagnostic Radiology for Emergency &
Family Physicians—Chattanooga
- Nov. 12-13 Ophthalmology Course—Chattanooga
- Dec. 10-11 Basic Clinical Genetics—Las Vegas
- Jan. 17 Prophylactic or Preventive Antibiotic
Usage—McMinn-Monroe County Med-
ical Society
- Mar. 2-3 Clinical Orthopedics—Chattanooga
- Mar. 20-23 Diagnostic Radiology for Emergency &
Family Physicians—Lake Tahoe, NV
- Mar. 21 Respiratory Infections—McMinn-
Monroe County Medical Society
- Apr. 14-15 Pediatric Course—Chattanooga
- Apr. 18 Postsurgical Infections—McMinn-
Monroe County Medical Society
- May 4-6 Basic Cardiology—EKGs & Therapy
for the Primary Care Physician—
Chattanooga
- May 16 Helminthic & Parasitic Infections Re-
quiring Intermediate Hosts—McMinn-
Monroe County Medical Society
- June 14-20 OB/GYN Course—Humacao, Puerto
Rico

For information contact: LeRoy J. Pickles, Direc-
tor, Continuing Medical Education, Suite 400, 921
E. 3rd St., Chattanooga, TN 37403, Tel. (615)
756-3370.

TENNESSEE PUBLIC HEALTH ASSOCIATION

- Nov. 15-17 Tennessee Public Health 1877-1977: A
Century of Progress, A Challenge for
the Future (national conference cele-
brating the centennial of public health
in Tennessee)—Hyatt Regency, Nash-
ville.

For information contact: Anne Stringham, 360
Capitol Hill Bldg., Nashville, TN 37219, Tel. (615)
741-1614.

EAST TENNESSEE CHILDREN'S HOSPITAL

- Nov. 1-2 Pediatric Neurology
- April 18-19 A Day and One Half of Practical
Pediatrics
- May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields,
Committee on Continuing Medical Education, East
Tennessee Children's Hospital, 2018 Clinch Ave.,
Knoxville, TN 37916.

TENNESSEE ACADEMY OF FAMILY PHYSICIANS

- Nov. 2-4 Annual Meeting—River Terrace &
Civic Auditorium, Gatlinburg. *Credit:*
up to 30 hours AMA Category 1 and
AAFP Prescribed. *Fee:* physicians, \$25;
interns and residents, none.

For information contact: Doris Darrow, Tennes-
see Academy of Family Physicians, 112 Louise Ave.,
Nashville, TN 37203, Tel. (615) 327-3515.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians
an ideal emotional counseling technique that fits
busy office practices. The technique uses a concept
of emotions that is consistent with human anatomy
and psycho-physiology. Yet, the technique requires
no more physician time or patient cost than routine
evaluations of new patients. Finally, the technique is
readily understandable and easy for practitioners to
apply.

One, two and three week courses. Minimum of
40 hours per week. *Tuition Fee:* \$350 per week for
the 1st & 2nd week of training; \$500 for 3rd week
of supervised practice with patients in the Intensive
RBT Treatment Program.

For further information contact: Maxie C.
Maultsby, Jr., M.D., Office of Continuing Medical
Education, Dept. of RBT, University of Kentucky,
Lexington, KY 40506.

Continuing Education Schedule 1977-78

- Nov. 10-12 Pulmonary Function: New Concepts
and Techniques—University of Ken-
tucky, Lexington and VA Hospital.
Credit: 16 hours AMA Category 1.
Fee: \$275.

For information contact: Frank R. Lemon, M.D.,
Continuing Education, College of Medicine, Uni-
versity of Kentucky, Lexington, KY 40506.

**KENTUCKY DIVISION
AMERICAN CANCER SOCIETY**

Nov. 4-5 Cancer of the Bladder and Prostate—
Stouffer's Inn, Louisville. *Fee:* None;
space limited.

For information contact: George A. Sehlinger,
M.D., President, American Cancer Society, Ken-
tucky Division, 2313 Medical Arts Bldg., Louisville,
KY 40217.

**UNIVERSITY OF MISSISSIPPI
SCHOOL OF MEDICINE**

Nov. 10-11 Cardiovascular Review Seminar—Uni-
versity of Mississippi Medical Center,
Jackson, MS. *Fee:* \$100; registration
limited. *Credit:* 17 hours AMA Cate-
gory 1; AAFP applied for.

For information contact: Continuing Health Pro-
fessional Education, University of Mississippi Medi-
cal Center, 2500 N. State St., Jackson, MS 39216.

**UNIVERSITY OF LOUISVILLE
SCHOOL OF MEDICINE**

Nov. 10 13th Annual Louisville Pediatric Soci-
ety Lectureship—Health Sciences Cen-
ter Auditorium, Louisville.

Nov. 11-12 11th Annual Newborn Symposium

For information contact: Billy F. Andrews, M.D.,
Department of Pediatrics, University of Louisville
School of Medicine, 200 E. Chestnut St., Louisville,
KY 40202.

MEDICAL COLLEGE OF GEORGIA

Nov. 1 Dermatology and Gynecology
Dec. 6 Diabetes Mellitus
Jan. 3 Cardiology
Feb. 7 Pediatrics
Mar. 7 Metabolic Diseases
Apr. 4 Gastroenterology
May 2 Orthopedics and Pathology

For information contact: Division of Continuing
Education, Medical College of Georgia, Augusta,
GA 30901.

XYTEX CORPORATION

Human Infertility Course

Dec. 9-10 Symposium in Human Infertility—At-
lanta Marriott Hotel, Atlanta. *Fee:*
\$125.

For information write: XYTEX Corporation,
1519A Laney Walker Blvd., Augusta, GA 30904.

**BOWMAN GRAY
SCHOOL OF MEDICINE**

Courses in Ultrasound

See August 1977 issue for listing

OF SPECIAL INTEREST

**NETWORK FOR CONTINUING
MEDICAL EDUCATION**

Schedule for Upcoming Programs

Oct. 17-30 Six Problems in Sexually Transmitted
Diseases—with William M. McCor-
mack, M.D., associate professor of
medicine, Harvard University Medical
School; associate visiting physician,
Boston City Hospital; and editor, Sex-
ually Transmitted Diseases, *The Jour-
nal of the American Venereal Disease
Association.*

Defining the Standard of Care—with
Kevin M. McIntyre, M.D., J.D., asso-
ciate professor of medicine, Harvard
University Medical School; and assis-
tant chief of cardiology, West Rox-
bury V.A. Hospital, Boston.

Pregnancy and Diabetes: A Team Ap-
proach for a Viable Neonate—with
Boyd E. Metzger, M.D., associate pro-
fessor of medicine, Center for En-
docrinology, Metabolism and Nutrition,
Northwestern University Medical
School, Chicago.

Oct. 31-
Nov. 13 A Clinical Approach to the Major
Motor Disorder of the Esophagus—
two part presentation with R. D. Hen-
derson, M.B., S.R.C.S., chief of sur-
gery, Women's College Hospital, To-
ronto; and associate professor of sur-
gery, University of Toronto.

Informed Consent: Malignant or Be-
nign?—with Kevin M. McIntyre, M.D.,
J.D.

Nov. 14-27 Electromyographic Testing for Neuro-
muscular and Other Diseases—with
David Campion, M.D., UCLA Institute
of Rehabilitative and Chronic Diseases,
Los Angeles.

Criteria for Elective Plastic Surgery—
with Edgar P. Berry, M.D., chief of
plastic surgery, Lennox Hill Hospital,
New York.

Arthritis in Childhood—with Bernhard
H. Singsen, M.D., Department of Pedi-
atric Rheumatology, Children's Hospital
of Los Angeles.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

*See September 1977 issue for complete
1977-1978 listing*

Postgraduate Courses

*See September 1977 issue for complete
1977-1978 listing*

- | | |
|------------|---|
| Nov. 14-18 | Renal Disease: Pathophysiology and Treatment—New York |
| Dec. 5-8 | Controversies in Gastroenterology—Philadelphia |
| Dec. 5-9 | Advances in Diagnosis and Treatment in Clinical Medicine—Los Angeles |
| Dec. 5-9 | Fluid and Electrolyte Balance, Hypertension and Renal Disease—Chicago |
| Jan. 9-13 | Contemporary Internal Medicine—New York |
| Jan. 9-13 | Workshops in the Pathophysiology, Diagnosis and Treatment of Electrolyte and Acid-Base Disorders—Philadelphia |
| Jan. 18-20 | Problems in Clinical Endocrinology—Seattle |
| Jan. 24-27 | Present Concepts in Internal Medicine—San Francisco |

AMERICAN THORACIC SOCIETY OF LOUISIANA

- Jan. 23-27 3rd Annual New Orleans International "Mardi Gras" SUPERCOURSE(c) on lung disease—Braniff Place Hotel, New Orleans. *Credit:* AMA Category 1 and AAFP. *Fee:* \$185.

- Jan. 23-27 10th Annual National "Respiratory Disease Care Course" [in conjunction with SUPERCOURSE(c)]
- Jan. 24-27 14th Annual International "Pulmonary Function in Health and Disease Course" [in conjunction with SUPERCOURSE(c)]
- Jan. 24-27 7th Annual National "Pediatric Pulmonary Course" [in conjunction with SUPERCOURSE(c)]

For information contact: ATS of Louisiana, 333 St. Charles Ave., Suite 500, New Orleans, LA 70130.

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

- Oct. 31-
Nov. 5 Laryngology and Bronchoesophagology—Eye and Ear Infirmary of the University of Illinois Hospital, Chicago. Presented by the Abraham Lincoln School of Medicine, University of Illinois at the Medical Center.

For information contact: Department of Otolaryngology, Eye and Ear Infirmary, 1855 W. Taylor St., Chicago, IL 60612.

AMERICAN COLLEGE OF CHEST PHYSICIANS

- Oct. 30-
Nov. 3 43rd Annual Scientific Assembly (Cardiopulmonary Medicine and Surgery: Current Perspectives and Future Frontiers)—MGM Grand Hotel, Las Vegas.
- Oct. 30 Management of a Respiratory Therapy Service (postgraduate course held in conjunction with ACCP Scientific Assembly)
- Oct. 31 Cardiopulmonary Technology Today (postgraduate course held in conjunction with ACCP Scientific Assembly)
- Nov. 28-30 Clearing the Respiratory Tract—Physiopathology and Therapeutics—New York Sheraton, New York. *Credit:* 20 hours AMA Category 1. *Fee:* ACCP members, \$165; non-member physicians, \$185; residents, nurses, therapists, \$145.

For information contact: Dale E. Braddy, MS, Director of Education, ACCP, 911 Busse Hwy., Park Ridge, IL 60068.

BETH ISRAEL HOSPITAL DENVER, COLORADO

See August 1977 issue for listing

Endless Records One Reason for Hospital Costs

WILLIAM J. WATT

Why are hospital costs so high? In plain layman's language, why are costs so high? You, the public, ask the question every day. Let me try to answer.

You probably have a favorite grocery store at which you do your weekly family grocery shopping. Let us impose some changes on the way that store operates.

First, we will create several different "authorities," each of whom has control over our store.

Next, these authorities will establish some mandatory rules under which the grocery store must operate:

(1) The store must record and report each year the number of cans of peas sold, by brand, by customer age, and by employer of the customer. For example: report sales of "Green Giant" peas to customers employed by General Electric by age groups 1 to 5, 6 to 16, 17 to 21, etc.

The same for "Green Giant" pea sales to customers employed by Chrysler Motors and so on. Next, the store will report "Libby" peas. We will require this report on not only peas, but for each and every product sold.

(2) The store must certify in writing that each customer "needs" groceries before permitting him to enter the store.

(3) The store must have a "committee" to establish a shopping "time limit" for each customer as he walks in the door. Any customer permitted to shop longer than the pre-established time limit may not be required to pay for groceries. The store must keep records of this by customer.

(4) The store must keep a record showing time customer entered store, items purchased, amount paid by item, name of stock boy who

placed each item on the shelf, time of customer departure from store and name of store employee who carried the groceries out.

(5) The store must obtain approval of the "authorities" before adding or deleting any product or specific brand of product.

(6) The store manager must have a master's degree in marketing.

(7) Periodically, the store will be required to determine and report the "race" of each customer in store during a particular day.

(8) The store must keep records and report the following to our authorities:

(a) Total number of customers served, broken down by employer.

(b) Total minutes of customer shopping.

(c) Number of customers who used shopping carts.

(d) Number of customers who did not.

(e) Number of customers who bought meat and nothing else.

(f) Number of customers who bought bread and nothing else.

(g) Number of customers who bought milk and nothing else.

(h) Number of customers who bought bread and meat.

(i) Number who bought bread and milk.

(j) Number who bought meat and milk.

(k) Number of customers who came in for one item only but who bought two or more.

(l) Number who went directly to left side of store upon entering.

(m) Number who went directly to right side of store upon entering.

(n) Number who sauntered down the middle aisle.

(9) Let us now mandate that the store "give away" \$50,000 worth of groceries each year. In fact, let us force the store manager to post signs in three languages, telling customers that he is required to do this, and again, records must be

Mr. Watt is the assistant administrator-comptroller of St. Joseph's Hospital Center in Syracuse, NY.

Reprinted from the *Congressional Record*.

maintained by customer on free groceries given away under this plan, as well as records on those denied.

(10) Next, let's require that for one half of its customers, the store cannot set prices. Instead, our authority will determine how much the customer may be charged. Better yet, we will tell the manager that these customers may be charged no more this year than last year's prices—regardless of how much more the store must pay for the items, and regardless of how much our new regulations have added to operating costs. After all, the store can double its price increases to the other one half to make up any loss.

(11) For that half of the customers, let us also require that the store cannot collect from the customer for groceries sold. Rather, the store must bill the customer's employer.

Better yet, we will mandate that the store must first write to the employer for "permission" to bill, then it may bill upon receipt of permission. In the meantime, the store may not attempt to collect from the customer for groceries received.

(12) Naturally, we will establish that the store is to be fined if it refuses to report the data we have outlined or if its records are not totally accurate.

(13) For topping, the store must hire an independent accountant to certify the accuracy of data reported under our regulations.

(14) To wrap things up, let's make the store manager responsible for planning each customer's meals. If he errs in judging what is best for a family—sue, sue, sue.

(15) But, let's not stop here just because you and I have exhausted our ideas. Why not add more people to each of the authorities! They will probably invent new controls and regulations to show they are earning their pay.



It sounds ridiculous to apply such criteria to a grocery store, doesn't it? But, believe it or not, hospitals are mandated by several authorities to report countless statistical data and are bound to many, many rules—not unlike those we have dreamed up for our grocery stores. Some examples of this are

(1) Report monthly and annual days of inpatient care, by age groups, by services (medical,

surgical, etc.) by type of financial coverage.

(2) Report outpatient visits in a similar fashion.

(3) Likewise for emergency room visits.

(4) Report total annual minutes of anesthesia administered.

(5) Count and report number of x-ray exams.

(6) Count and report number of films used in these x-ray exams.

(7) Report number of births for year.

(8) Report number of children served.

(9) Report number of physical therapy treatments.

(10) Report number of blood transfusions.

(11) Number of outpatients admitted as inpatients.

(12) We must give a certain amount of "charity care" each year and have multilingual signs posted telling our patients this charity is available.

(13) Report operations by number and type of operation.

(14) Reimbursement rates are established by outside "authorities" for more than half of total patients. Such rates are usually less than cost of care, so we charge higher fees to the remaining half to make up the deficit.

(15) We must obtain a signed certificate as to need for hospitalization.

(16) We must establish a "time limit" for hospital stay at time of hospitalization. An insurance clerk may declare an "overstay" and refuse to pay.

(17) We must seek "permission" to bill an outside third party for more than half of our patients.

(18) We must maintain detailed records of services provided, by date and by individual providing the service.

(19) We must periodically determine and report the "race" of each patient treated during a given day.

These are but a few of the many requirements we are told that you, the public, demand of hospitals today. They sound ridiculous when applied to a grocery store. And you can easily imagine the increased cost of groceries if the criteria were so mandated.

Now do you know why hospital costs are so high?



**Alcoholism More Dangerous
To Women Than Men**

Alcoholism is more damaging to women than to men, says a report in the July issue of *Archives of Internal Medicine*.

Scientists at the University of Toronto, Canada, report on a study of physical disease profiles of 135 female and 737 male alcoholics. The patients were similar in age, social class and referral pattern.

Although the women had been drinking hazardously for fewer years, the prevalence of most diseases was similar in men and women. There was an excess of anemia in women, and an excess of fatty liver and chronic obstructive lung disease in men. Women had double the frequency of cirrhosis of the liver.

The average duration of hazardous drinking before the first occurrence of almost all illness events was shorter in women, 14.1 years to 20.2 years. These findings suggest that the development of physical morbidity in relation to hazardous drinking may be accelerated in women.

There are indications that the incidence of alcoholism in women is increasing. The suggestion that the development of physical morbidity may be accelerated in female compared to male alcoholics should be a cause for concern and a stimulus for the further clarification of sex differences in the physical disease consequences of alcoholism.

**Causes of Perinatal Death
Tabulated in Research Study**

The U.S. infant mortality rate—regarded as one indicator of the health of the U.S. population—has been improving steadily since World War II.

In 1975 infant mortality rate was 16.1 per 1,000 live births. This represents a 44.9% decrease from 1950, when the rate was 29.2.

One study—seeking to catalog the causes of deaths between 20 weeks of gestation and 28 days after birth—is reported in the July 18 issue of *JAMA*, which reports findings of the Collaborative Perinatal Project organized by the National Institute of Neurological and Communicative Disorders and Stroke.

The study sought to identify underlying causes of death in 53,518 pregnancies in the United States, in 12 university-affiliated hospitals in different regions between 1959 and 1966. Autopsies were performed on some of the infants, and placental examinations on some two thirds.

The leading cause of death (17%) was acute amniotic fluid infection, causing pneumonia in the unborn or newborn. Second leading cause (11%) was premature detachment of the placenta prior to

birth. Premature rupture of the membrane caused 10% of the deaths, and 9% were attributed to inherited defects. A variety of causes was assigned in the others.

Three fourths of the deaths were due to disorders that at present are so poorly understood that it is not clear how they can be prevented.

The study concludes that the trend of decreasing deaths is certain to continue "if we learn more about the pathogenesis of the pertinent disorders and develop specific means to prevent them."

**Clinical Center Study of Patients
With Metastatic Soft Tissue Sarcomas**

The cooperation of physicians is requested in the referral of patients with metastatic soft tissue sarcoma for drug therapy trials being conducted by the National Cancer Institute's Clinical Pharmacology Branch and Medicine Branch at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients with metastatic disease or multiple recurrences would be potentially acceptable if they are ambulatory, under 55 years of age, have no known heart disease, and are in otherwise good health. Patients who have received prior adriamycin chemotherapy or mediastinal radiotherapy are ineligible for study but radiation therapy to other sites would not disqualify them. The studies would evaluate the efficacy of adriamycin and other agents in this disease.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Dr. Charles E. Myers, National Cancer Institute, Clinical Pharmacology Branch, Bldg 10—Room 6N119, Bethesda, MD 20014; Tel. (301) 496-6565.

**VA Hospital Study of Patients
With Various Types of Malignancies**

The National Cancer Institute—VA Medical Oncology Branch, located at the Veterans Administration Hospital, Washington, D. C. requests the cooperation of physicians in the referral of veteran or nonveteran patients with the following malignancies:

1. *Metastatic Prostatic Carcinoma (Stage D)* for treatment with chemotherapy and hormonal therapy. Patients who have failed estrogen or orchiectomy treatment are eligible. Patients must be ambulatory and may not have received either radiation therapy or previous cytotoxic chemotherapy.

2. *Hepatocellular Carcinoma (Hepatoma)* for treatment with chemotherapy. Patients must be ambulatory and may not have received prior radiation therapy or chemotherapy.

3. *Non-Resectable or Recurrent Gastric Carcinoma* for treatment with combination chemotherapy. The patient may have received prior definite surgery but must not have received previous radiation therapy or cytotoxic chemotherapy.

Continued on page 779

Continued from page 774

The referring physicians will be kept fully informed as to the results of treatment and are encouraged to participate in the follow-up care of their patients.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, NCI-VA Medical Oncology Branch, Veterans Administration Hospital, 50 Irving St., N.W., Washington, DC 20422; Tel. (202) 389-7275.

Clinical Center Study of Patients With Ovarian Cancer

The cooperation of physicians is requested in the referral of patients with ovarian cancer for studies being conducted by the Medicine Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients with all stages of ovarian cancer are eligible for ongoing studies provided they have received no previous chemotherapy or radiotherapy, are less than 65 years of age, and have no other major illnesses. Patients with epithelial ovarian tumors (serous mucinous, or undifferentiated) are also eligible. Those patients with tumors or borderline malignancy and ovarian tumors are not eligible, and patients with granulosa cell tumors who fulfill the above criteria will be considered for treatment as well.

Operative reports, pathology reports, blocks, and slides must be forwarded with the patient for review.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, NCI Bldg. 10, Room 12N226, Bethesda, MD 20014; Tel. (301) 496-4916.

Patient Education Program Enhances Medical Care

Something new in the medical care field is appearing on the American scene in the 1970s—patient education. Not the old, time-tested health education in which you are urged to lose weight, exercise, quit smoking, get vaccinated. But specific education tailored to you and your individual health problems and needs.

A planned system of patient education is now in use in more than 70 group clinics, hospitals and other health care centers, says Penn G. Skillern, M.D., of the Cleveland Clinic in Ohio. In these institutions there is a formally designated patient education center, a patient educator, and patient education programs. They are a part of the medical care program, and patients are charged a small fee for the service.

Patient education has always been part of the

professional responsibility of physicians, nurses and other health personnel, Dr. Skillern points out. But one of the most common complaints by patients is, in fact, that their physicians do not tell them enough about their illness. So, under sponsorship of the American Group Practice Association, starting in 1974, individual teaching programs were established by selected physicians and by a private company experienced in education programs.

At the start, the physician refers the patient to the patient educator for a specific program. Audio-visual filmstrip cartridges containing the program are inserted into a machine. By pressing a button, the patient proceeds at his own pace through a programmed presentation. Periodic pauses for questions test comprehension and reinforce learning. Major points are reviewed at the end of the program. Pre-testing and posttesting each patient's knowledge is included. The blank side of the audiotape can be used by the referring physician to individualize the program.

Organized patient education does not replace the physician as patient educator. Rather, it relieves the physician of having to give time-consuming repetitive information. Patients are charged from \$10 to \$15 for this service. Response of patients has been enthusiastic. More than 95% say the experience has been worthwhile and beneficial. Response of physicians has ranged from enthusiastic to resistant. Many physicians have accepted this new approach as an important aid in management of their patients. Others use it sporadically; some not at all.

The real question—whether patient behavior can actually be changed by education—still remains to be answered.

House Pets Related To Multiple Sclerosis

There appears to be a relationship between prolonged and close contact with house pets and the subsequent development of multiple sclerosis, says a communication in the Aug. 22 issue of *JAMA*.

In a study of 50 multiple sclerosis patients, 46 (92%) had close contact with a house pet prior to onset of illness.

The incidence of contact with sick dogs in the multiple sclerosis series was impressive. Several patients reported that a diagnosis of distemper was actually made for their dog within several years of the onset of their illness. The report confirmed a report earlier this year in *Lancet*, a British medical journal, in which 29 multiple sclerosis patients were studied.

Exposure to small indoor pets was particularly striking during the ten years before onset of initial symptoms. Exposure to small pet dogs or cats may sometimes be associated with subsequent multiple sclerosis. Apparently large dogs that spent most of their time outdoors did not present a relationship. It was the small indoor dogs that were implicated.



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Full- and part-time medical consultants are needed by an agency in Nashville to assist in the evaluation of Social Security disability claims. Physicians with specialty or general practice backgrounds, who are licensed in Tennessee, are being recruited to review medical evidence and consult with disability examiners. Contact Disability Services at (615) 741-7686.

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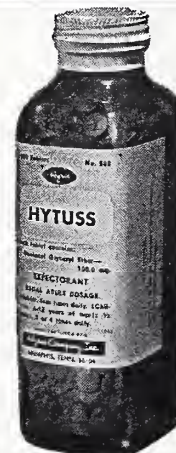
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Illegitimis Non Carborundum, or, The Grass Next Door

An Editorial

JOHN B. THOMISON, M.D.

*"All get what they want.
They do not always like it."*

Aslan, in *The Magician's Nephew*
(*Chronicles of Narnia*, vol. 6)

The late C. S. Lewis of Magdalen College, Cambridge, is widely regarded as one of the foremost scholars and writers of this or perhaps even of any other century. Among his many works is a series of seven volumes for children entitled the *Chronicles of Narnia*. For those who do not consider wisdom in an enjoyable package trivial, the *Narnia Chronicles* have a lot to recommend them.

The above quoted bit of wisdom is extracted from a conversation about forbidden fruit, in a sort of allegorical resetting of the encounter in the Garden of Eden, where Adam and Eve got not only what they were looking for, but a lot more besides. That script is replayed countless times by every child of Adam and Eve. It is about to be replayed by the federal bureaucracy.

Under the general heading of "World Health" there follow several addresses and some accretions which have come my way over the past few months. The nucleus is portions of a seminar on international health held last spring on the occasion of the annual meeting of Vanderbilt University's medical alumni. Dean John Chapman's opening remarks set the stage for Adam's fall. How far the National Health Service has fallen is recounted in two addresses on the subject, along with a commentary.

A recent visitor from England, a surgeon visiting Hospital Corporation of America, commented that it was refreshing to see for a change an administration interested in the doctors and

their patients. In England, he said, they are interested only in their papers and their statistics. Sweden comes off somewhat better, as theirs is really a superb medical system, but it suffers from want of continuity, and dwindling of funds is bringing the private practitioner back into the fore. In some ways, China seems to come off best of all, because everyone receives lots of special attention. But it is at the barefoot doctor level. Unfortunately, we are unable to publish Dr. Luckey's exposé of Russian medicine; but it is not much better. The difference between Sweden and the rest is traceable in no small measure to the strength of the Swedish Medical Association. Britain's is weak, the others nonexistent. AMA nonmembers and detractors, take note!

The grass is always greener in somebody else's yard, and it is greener still if it flaunts a "Keep Off the Grass" sign. "When the woman saw that the tree was good for food and that it was a delight to the eyes, and that the tree was desirable to make one wise, she took from its fruit and ate. And she gave also to her husband with her, and he ate. . . . Therefore the Lord God sent him out of the Garden of Eden. . . ."

There are in Washington those who, listening to the plaintive cries of some of their constituents, are contemplating the British and Swedish health care systems with greedy eyes. A copy could keep them in Washington, they think. They are setting about to dismantle the best medical care system in the world, and trade it off for votes.

They may get what they want. But they may find that in getting it, though they have gained the whole world, they have lost their soul. And what is worse, ours too.

Health Care in Britain

Opening Remarks

JOHN E. CHAPMAN, M.D.

I wish to open with a few comments which represent something of a philosophy that I believe in very deeply, a philosophy that may or may not be shared by our responders and our presenters.

The first is that I believe there is strength in diversity in medical care, and I think there is strength in diversity in health care as well. All those forces, whatever they are, by whatever nature and by whatever means, political or otherwise, which tend toward uniformity, in my view tend toward mediocrity.

The second tenet I would provide is that I believe the laws of economics that we all learn in *Economics I* do not apply to the desire and need on the part of the population, whatever it be, for health care—and notice I carefully avoided “sick care.” We have seen in this country through the years since 1963 that laws have been enacted by Congress, sponsored by Paul Rogers, sponsored by Ted Kennedy, and by others, that have been based in large measure on the fundamental premise that health care will obey the law of supply and demand. If the truth be known, the reason why the number of physicians has been increased by law every three and one half years is because of the fundamental premise that the law of supply and demand operates to move into those areas and the less specialized as to practice emphasis, and will ultimately move into those

areas less populated. Thus the law of supply and demand will force a redistribution of physicians both by geography and by specialty. These laws have tended not to diversify but to unify, and it is my view that it is through that mechanism we are headed for weakness in conformity rather than the general concept of strength through diversity.

The population is demanding individual attention by the expert and universal care by the generalist, meaning nonspecialist. It is not altogether clear why those individuals who enact our laws and who seek to formulate our policy say that individuals—physicians, nurses, and other health professionals—must be generally well qualified in all areas but yet expert in diverse areas at the same time. These contradictions have led our medical students into the frustrations of trying to be good at everything, finding themselves frustrated, focusing again upon one emphasis or very few specialties. We thus have an imbalance, an imbalance that our populace will not tolerate.

The United Kingdom several years ago developed a system which they felt at the time addressed these problems—the need for health care for all. The economics of health care is such that the economics of the situation is no longer the classical economics of supply and demand, as once thought.

Finally, the initiative for health care needs to be placed where the initiative should be, namely with knowledgeable health care professionals, with advice from a wide diversity of consumers.

We will shortly learn from Dr. Lister how the British system has developed, and subsequently from Dr. Scoville, a response to how that system is described. A comparison of the development and evolution of the British and American systems, where they have come from, where they are, and what these systems have achieved should, in part, be our guide for future planning and action.

Dean, Vanderbilt University School of Medicine, Nashville, TN 37232.

This article and the articles by Drs. Lister, Scoville, Stahlman, Grossman, and Byrd, were presented as a part of the International Health Symposium, sponsored by Vanderbilt University Medical Center and Vanderbilt University Medical Alumni Association, May 13-14, 1977, at Vanderbilt University, Nashville, Tennessee.

Health Care in the United Kingdom Today

JOHN LISTER, M.D., F.R.C.P.

May I say that it is a great pleasure and honor to be with you on this anniversary occasion. I am always rather hesitant about speaking about the health service these days because, unfortunately, I have to admit I am not as proud of it as I used to be. I think it was Churchill who once said that when abroad you should not criticize your own country or your own government, but when at home you should never cease doing so. I apologize in advance if I transgress Churchill's law.

"A comprehensive health and rehabilitation service would be provided so that for every citizen there would be available whatever medical treatment he requires, in whatever form he requires it."

Many of you will recall that it was the Beveridge Report, published in 1942, which inspired the National Health Service (NHS). The report contained wide proposals for the provision of social security so that it was hailed as offering security from the cradle to the grave. One of the major assumptions was that "a comprehensive health and rehabilitation service would be provided so that for every citizen there would be available whatever medical treatment he requires, in whatever form he requires it, domiciliary or institutional, general or specialist, and will ensure also the provision of dental, ophthalmic, and surgical appliances, nursing and midwifery, and rehabilitation after accidents."

Neither the financial implications nor the precise details of organizing such a service were spelled out, and although Beveridge did not exclude the possibility of some form of co-payment by patients, the NHS bill which was introduced

by the post-war minister of health, Aneurin Bevan, stipulated that no charges of any kind were to be levied on patients at the time they used the service. The NHS was introduced on July 5, 1948 only after prolonged and difficult negotiations between the government and the medical profession. Family doctors, or general practitioners, were determined to retain their status as independent contractors and succeeded in doing so by accepting only a small basic practice allowance, the bulk of their remuneration being from capitation fees in respect to all those persons registered on their lists of patients.

Unlike the Swedish system which was interesting, or part-time contracts which would allow them to engage in private practice, hospital staff members were finally offered the choice of whole-time contracts without the right to engage in private practice. A smaller number of hospital beds (about 1% of the total) were made available for private patients who would pay the hospital the full cost of their accommodations and the consultants for their professional services. Academic staff continued to be appointed and employed by the universities, being offered honorary contracts with the NHS in respect to their clinical duties.

In the early years of the service a spirit of goodwill and enthusiasm pervaded the NHS and there was a certain pride in the fact that Britain had introduced a measure widely regarded as being socially just. Even though many felt that some form of co-payment should have been incorporated in the terms of the NHS, the hope that in the future no one should be denied necessary medical attention because of a financial barrier was generally welcomed.

One of the major achievements of the earlier years of the NHS was the upgrading of the district hospitals outside the main teaching centers, where about 90% of the patients requiring hospital treatment now receive such treatment. Well-trained senior hospital staff were appointed and were active in developing their departments. The

Postgraduate dean, Northwest Thames Region, and Assistant British Postgraduate Medical Federation. Author of column "By the London Post" in the *New England Journal of Medicine*.

HEALTH CARE IN THE UK/Lister

hospital building program was disappointingly slow, but old hospitals were gradually modernized and a number of new hospitals were built.

Alongside the development of these district hospitals, another very interesting development took place in the 1960s. This was the develop-

ment of accredited specialists and seek consultant appointments. Those intending to go into general practice will follow what we now call a general practice vocational training course, whereby various rotating posts are arranged applicable to general practice or family practice with appropriate periods attached to suitable training practices. It is anticipated that it will be man-

In the early years of the service a spirit of goodwill and enthusiasm pervaded the NHS and there was a certain pride in the fact that Britain had introduced a measure widely regarded as being socially just. The hope that in the future no one should be denied necessary medical attention because of a financial barrier was generally welcomed.

ment of local education centers in association with these district hospitals. Many were built as the result of private funding from the help of local benefactors, but I must point out that the amount of money involved was very small. In these education centers, the kind of small group discussions with local family doctors coming into the hospital was very much facilitated. Although they were primarily concerned with the continuing education of doctors, they have also been used to involve medical students in district general hospitals where they see the kind of work they will see more frequently in their practices, but may see only infrequently in their rarified teaching hospitals. We are dealing now with an increasing number of students. The projected number of students that we expect to graduate up to the year 1985 is rising from 1975, when it was well over 3,000, to 4,000 in 1985. I might just make a comment in passing that I'm not sure we have any idea of how many doctors we really need, and any exercises that have been done to try and find out seem to be notoriously unreliable.

I also think you might just be interested to see what we are training these people for, that is, the medical hierarchy in Britain or the way that people can choose their careers. The medical graduate has to do a preclinical year comparable to your intern year, pre-registration year it's called; they're only on provisional registration when they graduate; and at the end of that first year they go into what is called general professional training if they become specialists. That takes about three years and is followed by four years in higher professional training or full senior residency program after which they be-

come accredited specialists and seek consultant appointments. Those intending to go into general practice will follow what we now call a general practice vocational training course, whereby various rotating posts are arranged applicable to general practice or family practice with appropriate periods attached to suitable training practices. It is anticipated that it will be man-

datory for those in general practice to go through such a plan, possibly after the year 1980, but the date has not been set because of the logistics involved. These developments evolved over the first 15 or 20 years of the NHS and they were quite exciting times.

We have counsels for postgraduate medical education in England, Wales, Scotland, and North Ireland. Each region has a postgraduate committee with a postgraduate dean—and that is my post in the northwest Thames region—and each district which manages the kind of little units I have described has a district committee. And just for your information, there are 14 regions in England and Wales.

Family doctors were less favorably treated at that time; many lost bed privileges they had previously enjoyed and their incomes were relatively poor. Nevertheless, in the first decade of the NHS it was possible to comment when colleagues from other countries remarked that of course "In Britain you have socialized medicine don't you?" "No, in Britain we have a National Health Service." And there was a real difference.

In my view the tragedy is that we are now drifting into the situation where we do have socialized medicine in Britain and I will try to trace the way in which the change has come about. First of all it should be remembered that although the NHS was introduced in 1948 by a Labour government, the Conservatives were returned to power in 1951 and remained the governing party until 1964. They had accepted the basic principles of Beveridge and apart from extending the range of charges for certain appliances initially introduced by the Labour gov-

ernment, and introducing a prescription charge, they did nothing to interfere with the fundamental principle that the service should be free at the time of use. On the other hand they did nothing to jeopardize the compromise arrangements whereby the majority of hospital consultants were part-time and engaging in private practice outside the NHS, nor did they do anything to threaten the independent contractor status of the general practitioner.

Certainly there were disputes between the profession and the Conservative government over pay and terms and conditions of service, but the appointment in 1962 of an Independent Review Body on Doctors and Dentists' Remuneration did much to overcome this source of conflict. But I must now turn to the problems which have beset the NHS in recent years. These have arisen because of escalating costs, political pressures, changes in the organization of the service and a consequent fall in the morale of the profession itself.

It has always been claimed that the NHS has been underfinanced and certainly Britain spends a smaller proportion of the gross national product on health care than most other developed countries. On the other hand the actual amount spent on health has risen from £400 million in 1948 to over £4,000 million in 1976-77 and it is often stated that cost-effectiveness is inadequately considered.

It has been the political pressures in recent years which have caused the greatest havoc in the NHS. The service is now one of the largest employers in the United Kingdom, employing more than 800,000 persons, many of whom belong to trade unions. Two of these unions, Confederation of Hospital Service Employees (COHSE) and National Union of Public Employees (NUPE) have been demanding more participation in the management of NHS and have been vociferous in their antagonism to any form of private practice within the NHS and even outside it. Again, I was interested in the remarks about Sweden. The Labour party has long been determined to eliminate private practice from the NHS hospitals on ideological grounds, and even when this was under discussion these unions took it upon themselves to withdraw services from private patients in certain hospitals. More recently one of these unions demanded the suspension of a consultant psychiatrist because some of its members had ob-

jected to certain comments he had made. Strike action was threatened if the consultant was not suspended and eventually the employing authority did suspend this man, even though no criticism of his clinical management of patients had been made.

The period when Mrs. Barbara Castle was secretary of state at the Department of Health and Social Security (DHSS) was characterized by unprecedented bitterness between the profession and the politicians, as it was she who prepared the bill to separate private practice from the NHS which was passed by parliament at the end of 1976. The Health Services Board, set up under the terms of the act, with an independent chairman, two trade union members and two medical members, is now preparing to implement measures which will eventually eliminate private practice from the NHS except for

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special cases where sophisticated equipment is required and not available in the private sector.

Apart from this abrasive legislation, the medical profession has suffered greatly from the rigors of the incomes policy operating during the last two years, and nearly all the recommendations of the review body concerning pay during the last two years have been compromised by this policy.

One of the defects of the original NHS was its tripartite character with separate administration arrangements for the hospital, family practice and the public health service. The principle of unification was not challenged by the medical profession but the complex administrative structure created to achieve it has been disastrous. Although it was claimed that the principles of delegating responsibility downwards to small multidisciplinary teams would facilitate decision making, the matching principle that these teams should be accountable upwards has often had precisely the opposite effect.

Furthermore, the medical advisory machinery is far weaker than before and there is no doubt

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that part of the philosophy of the reorganized health service was that the doctor was not much more important than other health care workers, which seems to be the general term for all employees in the NHS. In fact, although the public health service has virtually disappeared since reorganization, the structure of family practice and the hospital service remain distinct as before, although the regional and area authorities and the district committees are responsible for both aspects of the service and general practitioners, and hospital staff on these committees may be competing with each other for scarce resources. And there has been increasing central pressure to concentrate on providing primary care in the community rather than on more expensive hospital services.

It is not disputed that community care may be more appropriate than hospital care and will almost always be cheaper, but there is a strong suspicion that it is the latter fact which dictates government policy. Indeed there is constant government reference to the cost of hospital care, and it is frequently stated that the average consultant takes decisions costing £250,000 per annum whereas a general practitioner's decisions

The Labour Party has long been determined to eliminate private practice from the NHS hospitals on ideological grounds Part of the philosophy of the reorganized health service was that the doctor was not much more important than other health care workers.

cost no more than £35,000 per annum. There is no explanation as to how the figures have been determined, and as each consultant requires different resources and assistance according to his specialty it is difficult to see how the average consultant could be defined.

Furthermore the repeated reference to the advantages of community care over hospital care is having an adverse effect on the image of the hospitals which in the past have been focal points of local pride within the communities they have served. In my view it is essential to preserve the traditional place of the hospitals.

And now I must refer to two other policies of the government which have been affecting the character of the health service. The first has been to establish rational and systematic priorities throughout the health and personal social services, and a consultative document was published on this subject last year. The case for

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concentrating on primary care and for providing services for the elderly and the handicapped was well argued. In view of the need to ration scarce resources it was clear that extra expenditure in these fields would be at the expense of the acute hospital services.

The second policy of the government which has had a great impact, and if implemented will have greater impact, is a determination to allocate resources more evenly throughout the country. Because of the uneven distribution of the medical schools, the distribution of resources has been uneven and on a per capita basis there has always been more money available for health care in southeast England than elsewhere in the United Kingdom. Centers of excellence have been concentrated in this area and around certain other universities. The Resource Allocation Working Party has recommended a redistribution of available resources on a more nearly per capita basis with certain adjustments for existing teaching and research activities. Initial reaction to the proposal was most unfavorable, particularly in the Southeast, as it was thought that certain teaching hospitals might have to close and research projects would be jeopardized.

As a result of representation to the DHSS, a longer time scale has been accepted as necessary to achieve a more equitable distribution of resources throughout the country. But the principle of trying to achieve this end remains and the long-term future of London as a center of excellence both in teaching and research must be in some doubt.

For the time being, however, the main financial impact on the whole health service is due to

the combined effect of a no-growth budget, necessitated by the economic problems of the last two years and the inflationary spiral which caused the crisis, and means there has been a serious budgetary cut in real terms.

And so the policies of socialist philosophy, trade union power and financial crisis have com-

There is now virtually no private practice in the primary care service except in a few special areas such as parts of London, and less than 5% of the population are privately insured or pay for their own hospital care.

bined to lead to a situation where we do have socialized medicine in Britain. By this I mean that the State decides the global sum and indeed the per capita sum that shall be made available for health care and decides the way in which it shall be delivered. In Britain it is now delivered by primary care physicians working in groups. Their method of working almost eliminates any choice of doctor by the patient and there is little chance of assessing the standard of care provided. Patients requiring hospital investigations and treatment are referred by their primary care service and there may be a limited choice of consultant depending on the type of district and the size of hospital.

There is now virtually no private practice in the primary care service except in a few special areas such as parts of London, and less than 5% of the population are privately insured or pay for their own hospital care. Thus the situation has almost been reached when the public has been conditioned to accept the health care system which the State has decided it can afford to provide, with virtually no choice and no check on standards, but it is free at the time of use. This is what I mean by socialized medicine.

And finally I must consider the effect that this situation has had on the medical profession. The generation of consultants who came into the hospitals shortly after World War II and set about providing a good hospital service, building a private practice when opportunities presented and developing teaching and research activities in district hospitals, have become bitterly disillusioned because the rules have been changed and the whole situation has turned sour. But

younger consultants appointed within the last five to ten years are even more unhappy because they now have little chance of building private practices. Their salaries are grossly inadequate for the commitments most of them have undertaken and compare unfavorably with the incomes of general practitioners who have probably had less arduous training. Indeed general practitioners are probably the least discontented group of doctors at the present time as they remain independent contractors. They have managed to gain some increase in payment of expenses even during the period of the incomes policy, and their work is organized so that they are not overworked. The young men and women coming into the profession must be the consultants and primary care physicians of the future, and they seem to be taking the view that in present circumstances they can survive only if they adopt trade union tactics, and threaten or take industrial action if other methods of obtaining better terms do not succeed. It was indeed by adopting such tactics that they won a basic 40-hour-week consisting of ten units of medical time with overtime payments for any additional hours worked, with the result that senior residents now often earn more than their chiefs.

A wise physician, disillusioned by the confused medico-political scene, announced he would be attending no more committees. He would be retiring to tend his clinical garden, trying to practice good medicine and trying to teach others to do the same.

It was because of the cumulative effect of all these problems that the Royal Commission of Inquiry into the NHS was set up in 1976, the terms of reference being to consider in the interests both of the patients and those who work in the NHS, the best use and management of the financial and manpower resources of the NHS. The chairman, Sir Alec Morrison, who was also chairman of the earlier Royal Commission of Inquiry into the Regulation of the Medical Profession, has invited written evidence from anyone with views to put forward and all the official bodies concerned with the profession have submitted their evidence. Much of this has

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been published and reflects not only the general concern about the present situation but also the widely differing views on how the service should be remodeled. Removal of the service from direct political control by the establishment of a health service corporation has been suggested by some bodies and a simplification of the present complex administrative machinery has been widely canvassed. The introduction of charges for some services and changes in the method of payment of doctors have also been proposed, but at the other extreme the trade unions offering evidence want to see all private practice—even outside the NHS—outlawed. The commission will have a formidable task in sifting this evidence and formulating proposals which the government will then have to consider.

This will take a long time. Meanwhile our patients require treatment and individual physicians have to decide where they stand. I believe that in these circumstances it is essential to recall our original role of treating the sick. A wise physician, disillusioned by the confused medico-political scene, announced he would be attending no more committees. He would be retiring to tend his clinical garden, trying to practice good medicine and trying to teach others to do the same. In present circumstances it is difficult to do this, I fear, in the NHS which seemed to offer so much, but many of us have decided that that is what we must try to do.

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National Health Service in the United Kingdom

A Response

ADDISON B. SCOVILLE, JR., M.D.

Some of the comments I am going to make this afternoon will relate to the National Health Service prior to Mrs. Castle's famous dedication to destroy private practice. In any discussion about the feasibility of utilizing a health care system similar to the NHS, cognizance of the differences between the United Kingdom and the United States must be taken into consideration. England and Wales occupy an area of approximately 58,000 square miles which is slightly smaller than the state of Florida. The population of England and Wales is one fourth that of the United States and seven times greater than Florida's. Thus, no one is very far from a medical facility in the United Kingdom. Although there are many seemingly remote areas in the United States, more than 94% of its inhabitants are 45 minutes or less distant from a physician.

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Approximately 2% of the population in the United Kingdom is non-white—aliens, blacks, etc.—while the United States, according to the *Encyclopedia Britannica*, "has the most diverse population in the whole wide world." Anyone who saw fights erupt in lines of people waiting for gas during the shortages would have difficulty in imagining the American public standing in line for hours to obtain medical assistance.

Possibly one of the reasons for the equanimity of the British public and physicians and their acceptance of these inconveniences has been the involvement of government in health care delivery which preceded by 30 years the birth of the NHS.

There were about 65,000 medical practitioners in hospitals and general practice under the NHS in 1974. Of these, 25,000 were general practitioners. The general practitioner in the United Kingdom is the low man on the totem pole. He has little or no time for postgraduate study as

compared to his colleagues in the United States who must devote 150 hours to postgraduate study every three years to maintain membership in the Academy of Family Practice. With little or no time for postgraduate study which might prepare him for a specialty, he is locked into a system spending his time with form fillers, hypochondriacs, neurotics, and lonely and bored patients who need a leisurely examination, and loads many off to hospitals. Since the general practitioner rarely has access to laboratory or x-ray facilities, he must send those patients requiring more complex management to a hospital under the care of a specialist. The general practitioner has no hospital privileges himself and does practically no office surgery. For this the average doctor earns \$10,400 a year, the lowest in Europe, compared with a German average of \$23,000 and a Belgian average of \$21,000, both less than the average general practitioner in the United States. He receives a starting salary of \$5,200. In Britain the average factory worker makes \$7,000 a year. It is interesting to compare these figures with the average salary paid a house officer here at Vanderbilt University Hospital.

There is no peer review or PSRO in the United Kingdom. Doctors there believe peer review is an invasion of professionalism and when a good doctor makes an honest mistake there should be no liability. This plus the fact that British courts forbid contingency drastically limits malpractice suits. This, obviously, is one aspect of British medicine that would be welcomed here in the United States.

Of the 65,000 medical practitioners in the United Kingdom, 25% are foreign born, nearly

Possibly one of the reasons for the equanimity of the British public and physicians and their acceptance of these inconveniences has been the involvement of government in health care delivery which preceded by 30 years the birth of the NHS.

half coming from India, Pakistan, and Sri Lanka. The latter two countries have recently imposed restrictions on the emigration of trained medical workers which will decrease the supply of physicians available for the NHS. Roughly two thirds of the foreign doctors undergoing the language and competency test recently imposed by Great

Britain's General Medical Council continue to fail the examination.

The number of admissions to medical schools is determined by the government. Each year approximately 1,000 physicians emigrate and approximately one half that number return, for a net loss of 500 physicians. This number is the

Unfortunately there is little contact between the specialist and the general practitioner, unlike the situation in this country where ongoing assistance to the general practitioner by the specialist is considered mandatory.

equivalent of the output of five average-size medical schools or one sixth the number of doctors graduating each year. The free movement of physicians within the European Economic Community became effective in December 1976; how this will increase the emigration of physicians from England is problematical. By way of contrast, in the United States in the past six years the number of physicians in training has increased by 50%. In 1970, 40,000 Americans were in medical school and in 1976 almost 60,000 were in training. Similar increases have been noted among other health professionals. Nursing schools increased their enrollment by 52% and dentists by 25%, but more important, our graduates are remaining in the United States.

The specialist in England is salaried and geared to hospital work. His patients are referred by the general practitioner. By their standards he is well paid, but unfortunately there is little contact between the specialist and the general practitioner, unlike the situation in this country where ongoing assistance to the general practitioner by the specialist is considered mandatory. Because only 41 new hospitals have been built in England since the NHS came onto the scene with an increase in the patient load, and since attrition has taken its toll, the number of hospital beds has remained virtually static at roughly 505,000 since 1950. The number of short-term hospitals in the United States has increased from 5,031 in 1950 to 5,979 in 1975 with a resultant increase in short-term hospital beds of 442,000 and a decrease in long-term beds during the same period of time. Many doctors claim that under the NHS it is not unusual to wait 1½ to 2½ years for routine elective operations such as

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hernia repair. Because of adequate bed capacity in many cities of the United States such surgery can be undertaken within a few days.

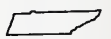
Almost 90% of the cost of NHS comes from general tax coffers and only 10% from the weekly fee paid by the public. Consider the opposition in this country when general tax revenues were suggested to put social security on a sound financial basis! Whoever develops a new health scheme for the United States must find an equitable way of financing it.

Finally, what have been some of our achievements in the medical-social realm? In 1931 people with low incomes saw physicians 49% less frequently than did those with high incomes. This gap was of concern because of the abundant evidence that serious illness is more common among the poor. By 1975, however, this inequity in the availability of physician services had been largely eliminated. Indeed, people of lower incomes are now seeing physicians slightly more often than those of higher income, averaging six visits per year compared with a national average of about five. In 1970, 32% of Americans did not see a physician during the entire year, but by 1976 this number had dropped to only 23%.

In 1970 black Americans saw a physician

12.5% less often than did white Americans. By 1976 this gap had largely disappeared and blacks, also a group with greater illness burdens, were seeing physicians as frequently as whites. Many of these improvements in patient care access had been assisted by the rapid growth of both private and public health insurance coverage. In the 15 years since 1960 the proportion of a patient's bill directly paid by him has been reduced by 40%, considerably easing the previously existing financial barrier of care.

There are still problems ahead which both we and the British must solve. Certainly scandals in the provision of medical care must be eliminated. Overcrowding of hospital emergency rooms must be handled in a more efficient manner and burgeoning costs for health care must be contained. There have been disappointingly small gains for two groups of patients—children and the elderly in low income categories—both of whom are dependent on others to get into the mainstream of medical care. These two groups have lagged far behind the rest of us and we have not, either in Britain or the United States, found a solution.

I have enjoyed hearing Dr. Lister and I hope that discussions such as these will lead both our countries to better methods of solving the problems of health care delivery. 

Commentary

Some Observations on the British National Health Service

MORSE KOCHTITZKY, M.D.

I thought there might be interest in some thoughts I put together summarizing a conference I had the opportunity of attending in May of this year regarding British National Health Service. The seminar was sponsored by the American Medical Association and was put on for us in a very excellent fashion by the Economic Models Group of Companies of London. This was the third such seminar on the subject put on for the AMA by the same group in a little over a year. It gave them the opportunity to bring us those things we need to know but did not necessarily want to hear, and I believe their

presentation was very fair and objective.

We were a somewhat conglomerate group, a little more than one third either staff, officers or Board members of the AMA, about one third representatives of state and county medical societies, either at our own expense or with expenses partially or wholly defrayed by the state or county society, and a little less than one third from various specialty societies and other health organizations, such as American Society of Internal Medicine, American College of Surgeons, American Dental Association, and American Hospital Association.

We had a rather strenuous five days. The first two were spent in lectures with question and answer sessions. The first day was divided into a description of the health provisions or services of the United Kingdom up to 1974 and then a session for 1974 to date. This was followed by an evaluation of the NHS from 1947 to 1974, as well as an evaluation from 1974 to date. Next we had a description of the role of the British Medical Association, which I will come back to later. The following day we were involved with the political objectives of the NHS, first by a Mr. Laurie Pavitt, chairman of the health services group of the Labor party of parliament, and later by a member from the Conservative party. Then we had an evaluation of the successes and failures of general practice by a Dr. Crane from the Royal College of General Practitioners, and a talk on the reason for the present discontent within the NHS among the hospital consultants by a Mr. Nigie Harris, FRCS, honorary secretary of the Hospital Consultants and Specialists Association.

On the third day we visited two hospitals and two groups of general practitioners' offices, which I will attempt to describe. The following day, again in lecture sessions, we discussed pretty thoroughly the planning system in the reorganized national health system, how well it was working or not working; the role of community medicine in reorganized health service; and the role of the unions as policymakers within the health service. The final day we toured St. Thomas' teaching hospital in London and again had an opportunity as we had had in our previous hospital tour to have lunch with the district management teams and discuss some of their problems.

The plight of the general practitioner in the United Kingdom is a pretty sorry one. He officially makes approximately 15,000 of our dollars a year. There are various financial arrangements which help him some with respect to his secretary, receptionist, nurse, and even his rent if he owns his own building, but for the most part he conducts a sick call. If a patient is truly ill he is referred to the hospital. If a patient needs consultation, regardless of the reason, he is sent to the hospital. Very little if any treatment is done in the doctor's office. As a matter of fact, I did not even see a set of stirrups in the offices or examining rooms of seven general practitioners I visited. They do, however, admit to doing Pap smears. The average general prac-

titioner has approximately 2,000 to 2,500 individuals on his list, for whom he is paid a capitation grant. He is able to make some extra money by various means (moonlighting) but not much. The economic situation in England is such that he cannot afford to send his children to private school unless he has inherited means in the past. Inheritance taxes now are such that he can no longer do even that. One general practitioner who had been fortunate enough to inherit money stated that while he had been able to educate his children in private schools, his children would never be able to do so unless they entered industry or something of this sort, rather than follow their family tradition of medicine.

It is a pretty sorry plight for the physician, and as Bob Hunter, the new chairman of the AMA Board, commented, the situation regarding the family practitioner as well as that in the hospital mandates mediocrity.

I could see absolutely no interest in quality with the exception of that generated by the individual practicing physician. As I see it, their government actually frowns on quality. The general practitioner has no time for quality, nor does he have an incentive. But then, neither does the hospital consultant.

It is true that the general practitioner, although he is working on contract with the government, does have the autonomy of being an independent practitioner, responsible for the care of his own patients, and in that sense he is not responsible to the federal government. This also means, however, that there is very little if any quality control. It would be considered an insult to the physician in the United Kingdom to suggest to him that he have peer review or audit committees or tissue committees. To question his ability or his willingness to do his absolute best at all times would be unthinkable.

With respect to the hospitals we visited, one would not have been allowed to remain open in this country, and the other, a relatively new and fairly well-equipped active general hospital in a community of about 70,000, was only mediocre. It is my understanding, and I did not confirm this, that this hospital in High Wycombe is one which Senator Kennedy has held out as such a marvelous example of what can be done. If this is true, we certainly don't want it. The only thing I saw in that hospital which compared even favorably to anything in our country was that in the doctors' lounge there is a bar. All the doc-

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tors seem to assemble there before lunch, and while admittedly our visit was a big occasion it seems to be their regular practice. This may very well account for the fact that they work from whatever time they desire to get started in the morning until the lunch hour, following which very little is done, possibly because they are less capable in the afternoon.

At any rate, their operating schedules are less than busy. They start when the anesthesiologists decide to; they are about as competent as their nurse desires to be, which for the most part is much less than optimal; and their technicians work sort of ad lib, making for a very disconcerting atmosphere in which no one knows who is going to be where or when, to do what, or to whom. The attitude also is that, well, if we don't get to you today, maybe tomorrow or the next day, or certainly within the next few months—or years.

The teaching hospital in London which we visited on the last day was considerably better in many respects, but the one thing they really had going for them was their x-ray department. The reason this was good is that they were just now getting their modern equipment. No new money to speak of is being spent for hospitals or equipment in the United Kingdom at the present time. There just is no money for expansion of the physical facilities beyond those that are absolutely necessary. This makes for crowded outpatient departments; it makes for sending back home at least 50% of those persons referred to the outpatient department, maybe to be seen again there, maybe not. It means that consultants do the outpatient treatment of those patients referred by the general practitioner, and at the end of the treatment the patient is returned to the general practitioner, seldom if ever with any information as to what went on, and certainly not back to the general practitioner with advice from the consultant as to how to treat the patient. The consultant instead seems to do all the therapy of any magnitude that is done. This was certainly a disappointing visit to a leading medical school and teaching hospital.

The monies to operate the hospital facilities are allocated by the central government to regions, which have a considerable degree of autonomy. Many of their problems arise, however, from what I consider false assumptions. For instance, much like our own VA system, if

you don't spend all your money this year you don't get as much next year, regardless of your needs in either year. Next, if you do the job they asked you to, if you reduce morbidity and mortality, if you really work hard and take care of the people in your district, then you get less money next year because you have accomplished so much this year. You get no credit for having done your job better than anyone else. The teaching institutions are treated in very much the same fashion. If you reduce morbidity, you get less money. There is a purposeful decision not to give additional protection to centers of excellence, which obviously need more money in terms of teaching, and not just mere money for patient care. Here again, it seems to be mandated mediocrity.

The main thing the British NHS has going for it, as I see it, is that there truly is access to the system by every citizen of the United Kingdom. This, of course, does not mean he gets anything when he gets there. As I have already stated, I believe their best is very mediocre in terms of delivery of care. The "man on the street" however does not seem to understand or have any idea how to correct this problem. To him it is enough to know that if he becomes seriously ill his hospitalization and medical care is already paid for. He assumes he will eventually get this care. He is aware that the quality of care is not what he would desire. It does not seem to disturb him as much as it would me that he may wait anywhere from six weeks to six months to get a barium enema if he is suspected by his general practitioner of having a carcinoma of the colon, nor does it worry him that if he has a symptomatic inguinal hernia he may wait two to three years to have it fixed if his job is sedentary, though he may get it done a little sooner than that if he is a laborer. They are used to long waiting periods and long lines and are not particularly upset by this state of affairs.

The fact that Britain has gone a long way down the socialist road means that both those outside and within the profession accept a degree of socialism which would be abhorrent to the majority in this country. I am afraid the United Kingdom has gone too far to do much about reversing their situation. However, all of them agree if any reversal is to come about, it must be by the patient's assuming some financial responsibility for his own care. Deductibles for hospital stays and/or co-payments for both office

and hospital physician bills as well as for the hospital bill per se, and probably even for drugs, as well as the way teeth and glasses are currently handled, seem to me to be a necessity. A complete reversal of the process in the United Kingdom would be impossible, and possibly even ruinous to what economy they have left. It surely would be a political impossibility at present.

This does strike me as saying that one of the things our country needs to do is recognize the fact that while some 85% of our people are covered by some sort of insurance, this leaves us with 15%, or some 20 million plus persons, who are not covered either with Medicare, Medicaid, or private insurance. This is not an inconsiderable number of people, and yet it is few enough that there has to be some better way than federalization of the whole industry to solve this relatively small (percentage-wise) problem. It may very well be that some form of comprehensive health insurance which does not involve interference with delivery of health services per se is very much in order. I believe that AMA through its various affiliates is the proper place for us to apply our interest, efforts and abilities to obtain the continued quality care of patients in this country, as opposed to what is obviously happening in other countries where the emphasis is primarily on quantity. In my opinion, we can provide quality health care on a private enterprise basis if the government is not allowed to interfere too greatly on behalf of those relatively few people who should be the responsibility of the bureaucracy, i.e., the Medicaid recipient.

To say the least, this entire experience was a frightening one.

It's frightening first because our country is being misled into some of the same political situations that led to the socialistic system that

the United Kingdom now has. It is frightening because some of the things we are being led to believe with respect to the comparison between their system and ours are patent falsehoods. Next, it is frightening because our government is attempting to divide us, the medical profession, in much the same way the physicians in the United Kingdom were divided. Because of this division they find themselves in a pretty sorry situation.

If I have one real point to make, it would be that the ineptness of the British Medical Association, the failure of the profession in the United Kingdom to stand together at any time, the ability of the government to offer tidbits to various fragments and, therefore, to divide the profession to the extent they were able to completely conquer them piecemeal, is one that I do not believe we in this country can afford.

In my opinion, we must have a strong central organization, which I assume is to be the AMA. While we need not all agree in total with all the actions taken by the House of Delegates or by various and sundry leaders, it is a necessity that we back the decisions of the House, work assiduously for the major policies as designed by the Board and the House, and thereby present to our federal government a unified federation, not allowing them to pick us off one small group at a time.

My visit to the United Kingdom may not have done much more than give me a firsthand, on-the-spot insight into the problems that I already thought existed in the British health care service. Being on the spot, however, and having my impressions confirmed by what I saw and heard does strengthen my conviction that it is necessary for all of us to do what we can to avoid their unfortunate circumstances.

345 - 24th Ave., North
Nashville, TN 37203

ANOTHER OBSERVATION ON BRITISH NHS

To the Editor:

I have recently toured southern England with a bicycle tour. I enjoyed talking to the English people as well as touring the country.

On the tour two ladies fell and broke bones. Accompanying them to the hospital, I was able to view a very depressing sight. The outside of the hospitals appeared old, germ infested, and very dingy. Inside it was worse. Though in good health, I was depressed at being there just from the appearance.

In talking with the English people, we discovered that all felt the quality of health care they are receiving is inferior. One English lady told us she had to wait two years for a hysterectomy because of the surgery schedule.

This encounter with people living under socialized medicine convinced me I'm not in favor of socialized medicine.

Mary Edith Wentler, R.N.
233 Lauderdale Rd., Nashville, TN 37205

Medicine in Sweden

MILDRED STAHLMAN, M.D.

I have been asked to discuss delivery of health care in Sweden. I should first like to share with you the background from which I speak to this subject. I first went to Sweden in December of 1949 as a research fellow in pediatrics at the Karolinska Institute in the department of Professor Arvid Wallgren, who had been Vanderbilt's Flexner Lecturer earlier that year. I spent one year doing research on newborn infants, and also served for several months as a ward doctor in Nortulls Hospital, one of the two academic pediatrics departments in Stockholm. Beginning with that experience I have maintained a close and, in the last ten years, a working relationship with the physicians and departments of pediatrics throughout Sweden, and I spend one to three weeks there most years. I now have joint protocol

A sense of responsibility for the welfare of others has been a dominant factor in the evaluation of [Sweden's] health care delivery system . . . [which was] largely designed and implemented by the medical profession itself.

research projects with the Department of Pediatrics at the University of Gothenberg and have had one or two Swedish physicians each year in my laboratory for the past ten years. What I am about to describe stems from my own understanding of the Swedish Medical System, heavily augmented in details by one of my current fellows, an associate professor from the University of Gothenberg, Dr. Ragnar Olegard.

First, it should be emphasized that Sweden is a small country, about the size of California, with about 8 million people. The people were, until very recently, remarkably uniform in their racial, socioeconomic and cultural background, and are, perhaps, the most socially moral, in the highest sense of the word, of any population I have known. Their sense of responsibility for the welfare of others has been a dominant factor

in the evolution of their health care delivery system. Their system has evolved over the past 40 years, largely designed and implemented by the medical profession itself, rather than having been imposed upon the profession by political means.

First, let me describe medical education in Sweden. There are seven medical schools, and students are chosen competitively by scholastic achievement from graduates of the student examination, roughly the equivalent of our junior college level. Selected nurses are also currently accepted on an experimental basis. Following a six-year curriculum, about 900 students are graduated each year. For two subsequent years the graduate has a limited license and must work in a hospital and outpatient clinic under supervision, with six months in psychiatry, six months in surgery, six months in internal medicine, and six months in general practice. These are roughly equivalent to our interns. Then, in order to become specialists, they spend additional time in subordinate positions equivalent to our residents, mostly in hospitals or outpatient departments. The time for specialization is three years for general practitioners, and four or five years for the other specialties. A new graduate makes about \$14,000 per year and since medical tuition is free, a graduate does not end his schooling in such debt that taking the best paying job is an immediate consideration.

Following specialty training, physicians compete for permanent jobs. They are appointed by the local assembly of the county where they choose to practice, upon recommendation of the chief physician where they will work.

If a physician chooses to stay in academic life, there is pressure to do a formal postgraduate doctoral thesis in either basic or clinical research. Docents, roughly equivalent to associate professors, and professors, who are departmental chairmen, are selected competitively by a board of three peers who read and judge their bibliography. A faculty can appoint a docent, but the ultimate decision of the choice of a professor is by a political board (formerly by the king). To be a professor and chairman in Sweden is a marked honor and places the recipient in the

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highest social category. Currently professors in clinical departments make about \$45,000 per year. Associate professors make about \$30,000, and clinical specialists about \$28,000, whether hospital or outpatient based. As described later, extra money can be earned as supplemental income; some physicians may become consultants to insurance companies.

Graduates who choose to stay in preclinical departments are usually recruited early in their medical school experience, often break their school time to earn a Ph.D., and afterwards finish their medical schooling. They then become faculty members of medical schools and are paid about \$20,000 per year by the na-

Remuneration of clinicians is the same from one place to another and across specialties.

tional government. It is difficult for them to supplement their income, except for those who can act as consultants for pharmaceutical companies.

In sharp contrast to most systems, remuneration of clinicians is the same from one place to another and across specialties. For instance, pediatricians are paid the same as neurosurgeons. Physicians are considered among the best paid civil servants.

In addition to physicians, there are nurse midwives who deliver all but high-risk infants, always in a hospital with an obstetrician immediately available to them for consultation or complications. There are also district nurses, perhaps 10 to 20 per county, paid by the primary community. The district nurse may run an office, but largely makes home visits and carries out the medical orders prescribed by a general practitioner. Nurses do much of the well-baby and well-child care in clinics under the supervision of pediatricians, and also may serve as social workers.

There are three levels of hospitals: (1) regional hospitals, (2) central hospitals, and (3) "normal hospitals." A *regional hospital* is usually a university teaching hospital and has both in- and outpatient facilities for all specialties and subspecialties. Their physicians are full-time employees, with both in- and outpatient responsibilities. All physicians except full professors (departmental chairmen), who, in my experience, informally work much more time, are on duty for a 40-hour-week. They also rotate night

and weekend calls, which are compensated at time-and-a-half, or overtime can be taken as free time.

There are usually four to seven *central hospitals* for each of the eight regions, with a minimum of at least one. Their staff covers most specialties, and there is always a pediatric department paired with an OB-Gyn department. Physicians are compensated as at the regional hospitals.

Associated with central hospitals are decentralized outpatient clinics manned by publicly employed doctors with both therapeutic and prophylactic responsibilities, for instance, prenatal and well-baby care. In these clinics there are always two general practitioners, one or two pediatricians, and one obstetrician, and many will also have an internist and a surgeon.

Normal hospitals are in smaller communities and have surgery, internal medicine and anesthesiology represented; they also run an outpatient department, but they have neither OB-Gyn nor pediatrics.

Publicly employed physicians, working 40 hours a week in the system described above, may also do part-time private practice after hours. In larger towns and cities, night coverage is supplied on a voluntary basis by physicians who make house calls with a car and driver supplied them. They may refer patients to a hospital if medically indicated. They are well paid for this type of service, which many physicians take about once a month.

Physicians in full-time private practice both complement and compete with the system.

Physicians in full-time private practice both complement and compete with the system. They may work part-time within the system, in positions such as school doctor, who may be either a general practitioner or a pediatrician, and who is required only three hours per week. (A school nurse is available at all times.) The school doctor might have his private practice in the neighborhood of the school he serves. Private practitioners may also work part-time in well-baby or obstetric clinics. Obstetric patients may go to a private physician for prenatal care, but must be delivered in a hospital, where someone else is in charge of the delivery.

MEDICINE IN SWEDEN/Stahlman

There are two major sources of funding for medical care within the national health system: health insurance and county tax payments. General public health insurance is obligatory and covers a patient's fee when he is seen in a publicly employed physician's office, except for \$3 per visit, or for \$4 per visit when he is seen in a private doctor's office, if the private doctor has joined the insurance system. Insurance covers hospital fees with doctor's fees included for patients treated in a hospital in their own county. A person may also be treated in a hospital outside his county if his doctor, who must be an attending physician in a public hospital or in a public outpatient clinic, makes the referral, or if he has to be treated outside his county as an emergency and cannot be transferred without risk. Hospitals are governed by the county house of representatives, which is a directly elected political assembly for each county and which has the authority to levy county taxes. These taxes cover all county expenditures, including population statistics, but exclude certain projects of common interest to the national government which get support for the state. The tax amounts to about 25% of personal income and is not on a sliding scale.

In addition to county hospitals and their outpatient clinics, the county also supplies local outpatient services in smaller communities with

bill. During the past two years employers have had to pay this fee, which was described by the politicians as a "tax reduction." Actually, it has increased the cost of the business enterprise by increasing "fringe benefits." The self-employed still have to pay this fee themselves.

Patient care costs while in a hospital are only partially covered by insurance. The principal portion is covered by tax money directly from the county taxes. There are a few private hospitals where care is covered by a small amount of insurance, but it is mostly paid for by the patient himself. For instance, elective cosmetic surgery is all done in private hospitals and is not covered by insurance. Insurance pays for visits to public outpatient clinics up to a fixed sum, dependent on the type of consultation. The county tax pays the difference. Private doctors enrolled in the insurance system are paid by insurance according to a negotiated schedule. The insurance company is then billed by the doctor according to this schedule.

The private doctors will become increasingly important to the system, as there is now a fixed ceiling on the amount of county tax, and it cannot be increased much more. This tax ceiling causes pressure to optimize the cost/benefit ratio of medical care and puts the private physician in a position of competing with the system.

I will conclude with a few general observations about the system:

(1) It is an old but evolving system, having

The system's acceptance by the medical profession has been dependent on their strong Swedish Medical Association, which, despite much internal divisiveness, has presented a unified position to the government and is the bargaining agent with the government in all negotiations.

a varying supply of "district doctors." These are general practitioners and pediatricians, often supplemental from other disciplines such as obstetrics, all of whom are qualified specialists. The district doctors and pediatricians work 40 hours per week, and a varying but substantial portion of their working time, often as much as 50%, is spent in preventive medicine.

General public health insurance, the second major method of supporting health care, is financed by a special fee which is obligatory, and, until recently, was part of one's personal tax

begun 200 years ago; it was formalized 40 years ago, and is still changing to meet new pressures.

(2) Its acceptance by the medical profession has been dependent on their strong Swedish Medical Association, which, despite much internal divisiveness, has presented a unified position to the government and is the bargaining agent with the government in all negotiations.

(3) The possibility of medical care of excellent quality has been provided all patients, but probably equally important is the ease of access to the health care delivery system. In most

instances this access is real, but current pressures are placing it under a strain.

(4) The system emphasizes *health* maintenance and not *sickness* care, so that crisis medicine has largely been replaced by preventive and social medicine.

(5) The uniformity of the population, racially, educationally, and economically, has promoted good health and acceptance of good health care.

(6) The relatively high socioeconomic status has promoted high wages, and taxes have been

available to pay for good health maintenance.

(7) The most frequently expressed criticism of the system, both by patients and by physicians, is the lack of continuity of care, the inability to have one's own physician or one's own patient population.

(8) The system may be approaching a crisis, as tax ceilings are reached and priorities begin to be set for the expenditure of limited resources. A more important role for the private physician may be one of the results. 

Further Observations on the Delivery of Medical Care in Sweden

A Response

LAURENCE A. GROSSMAN, M.D.

I enjoyed Dr. Stahlman's comprehensive account of medicine in Sweden. I can add only a few impressions gained in three or four trips to the country. Some of the most delightful people I've met throughout the years have been Swedish physicians. I first knew Dr. Alwall, the initial European nephrologist, who works at the University of Lund.

The Karolinska Institute has superb equipment not excelled anywhere in Europe. The standard of care is great. Sweden does not have problems that we experience in medical care in the United States. There is no poverty; there is no peasant class; everybody is of one stock; there is no racism. Everyone has a good income and usually has access to the health care system no matter where he lives in this world. On the editorial page of the current issue of the *Journal of American Medical Education*, there is a comment on Senator Hubert Humphrey's speech to the Senate in which he quoted an article by Dr. Harvey Brenner of Johns Hopkins based on a study of the years 1970-1975 relative to the cost of health care. Dr. Brenner states: "Unemployment has a strikingly potent impact on society; even a 1% increase in unemployment creates a

legacy of stress, of aggression, of illness, affecting society long into the future." According to his study, which involved about 1.5 million people, the unemployed during the years 1970 to 1975 sustained the following *additional* deaths: 20,240 from heart and kidney disease, 495 deaths from cirrhosis of the liver, 920 suicides, 648 homicides—a total of 36,880 deaths. In addition, there were in this group 4,227 state mental hospital first admissions and 3,400 prison admissions. Our health care system is tied pretty much into societal and the other problems.

I had several unforgettable experiences in Sweden. One occurred five or six years ago in a small hospital in Stockholm which was totally computerized. It was my first experience in a computerized hospital. A patient came in with an acute myocardial infarction. The history was immediately available. Using the patient's doctored number caused his entire medical history to be projected on a screen. It was interesting and informative. It related the two times he had been treated for Neisserian infections, and there was other irrelevant information which in an individual with a myocardial infarction who was moderately ill should not have been spread throughout the hospital. This convinced me that computerized medical histories have disadvantages.

From the Department of Medicine, Vanderbilt University Medical Center, Nashville, TN 37232.

MEDICAL CARE IN SWEDEN/Grossman

The cardiologic radiology equipment at the Karolinska Institute was magnificent. The Phillips Company uses this hospital as their model. The professor of radiology was interested in the cardiac surgery program and in the comparison of selective angiography done in this country with their aortic root angiography. His difficulty in

If we have something to learn from the Swedish system it will be in the care of our older citizens and the facilities and methodology available for the investment needed.

getting approval of certain committees was reminiscent of our own state of affairs.

Theirs is a complacent society. It contrasts with the inventiveness, the initiative and the resourcefulness I noted when making rounds in Leningrad in a heart hospital which would be considered primitive in comparison with the Karolinska Institute. There I saw the man who ten years previously had undergone the first aortocoronary bypass procedure in the world. The surgeon had used the femoral artery as his grafting material. He replaced the artery with the saphenous vein. No complacency existed in this environment.

Most impressive of all was Sweden's care of the aged. I have never seen such compassion and

quality as their approach to elderly people. Every district has homes and housing for the aged. There is true cheerfulness, whether in a hospital or in the housing complex for people who are debilitated in their older years. The equipment is sophisticated and the personnel are superbly trained in handling elderly people. Their love and affection permeates each institution. If we have something to learn from the Swedish system it will be in the care of our older citizens and the facilities and methodology available for the investment needed.

One of the popular journals for those of us in practice is *Medical Economics*, the current issue of which has a very interesting article on Swedish health care written by a man from a small town in Minnesota who spent several weeks in a community hospital in one of the outlying districts in Sweden. He contrasts the waiting time for certain elective surgical procedures. It is here that the system bogs down. The waiting times are remarkably prolonged, and cost comparisons are notable. With the government paying the bill, an illness costs much more in Sweden. The cost of a surgical procedure in Minnesota is approximately 60% of that for the identical operation in Sweden.

All that glitters isn't always gold! Sweden, one of the richest countries in the world, the country with the most advanced form of medical care and the fewest social problems, also has difficulties, imperfections, and resistance to change.

The American people stand firm in the faith which has inspired this Nation from the beginning. We believe that all men have a right to equal justice under law and equal opportunity to share in the common good. We believe that all men have the right to freedom of thought and expression. We believe that all men are created equal because they are created in the image of God.

From this faith we will not be moved.

The American people desire, and are determined to work for, a world in which all nations and all peoples are free to govern themselves as they see fit and to achieve a decent and satisfying life. Above all else, our people desire, and are determined to work for, peace on earth—a just and lasting peace—based on genuine agreement freely arrived at by equals.

Harry S. Truman
INAUGURAL ADDRESS
JANUARY 20, 1949

Health Care in China

"A look at the flowers from a running horse."

BENJAMIN F. BYRD, JR., M.D.

It is very difficult to follow anything that is as interesting as Dr. Luckey's remarks and his presentation, and I must confess I never felt I got very close to the health care delivery system in Russia. We visited Moscow and we saw what they are doing with cancer and also saw their research interest in cancer. But to actually get the feel of the care that was being given to the patients—I never had the sensation I was very close to it. Our observations were essentially the same as those of Dr. Luckey, but I thought perhaps it would be of more value to the group this morning for me to present the contrast with our experience for something over three weeks spent in the People's Republic of China.

There is no alcoholism in China; there is no venereal disease in China. We talked to Dr. Ma (Dr. George Hatem) who was on the Long March with Chairman Mao, and who served as health advisor to the People's Republic. He is the individual responsible for eliminating venereal diseases and his remarks about how he did it were completely fascinating. From our conversations with him, it seemed that it was accomplished on a voluntary basis by approaching the people with the idea that they were entering a new social order and that it was wrong to take the diseases of the old social order with them. The principles of health care are isolation of the infected individual and conversion of this individual into a noncontagious state. According to Dr. Ma there are many people who have tertiary syphilis, but are not infectious. But that is a story in itself.

There are no more than two children in the family. Late marriage is the custom—marriage at

the age of 25 or older for the woman and 27 or older for the man—but this is not a social obligation. There are about 800 million people in China, though they have not had a census in 20 years, and I saw little sign that they had any intention of taking one. So the reliability of their incidence figures for cancer is limited; however the courageous attitude of the government in trying to deliver health care to 800 million people is fantastic. We saw a 400-bed hospital in Canton which has 100 beds for surgery, 100 for radiation, 100 for medicine, and 100 for gynecology. Each year this hospital treats 2,000 new cases of nasopharyngeal cancer. In Linhsien we saw a 120-bed county hospital, viewed for the first time by any Western visitors, and it was also the first observation by Western visitors of a Linhsien study program. In this county there are at least 1,000 new cases of esophageal cancer each year. They have some really awful problems.

The ability to get a handle on health care in China is almost unbelievable, but the health personnel seem to have done it. The lessons which they followed are attributed to Chairman Mao. These lessons are centered primarily in prevention, coupled with the realization that the only thing possible in the area of medical care which can be immediately effected is a reduction of the magnitude of the problem. Prevention is the number one effort in China. They have eradicated schistosomiasis, which was supposed to be one of the causes of cancer of the liver, because liver cancer is the most common cause of death in Shanghai. The attack on the problem of esophageal cancer in rural communities is through use of commercial fertilizers. There is a lack of molybdenum in the soil, and to correct this, they have tried to educate citizens to use a type of commercial fertilizer. Until this recent effort only night soil was available as fertilizer.

One of the principal health efforts has been the

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HEALTH CARE IN CHINA/Byrd

placing of barefoot doctors into the countryside. There are about 1.8 million barefoot doctors in China. The local solution to the cost of medical care is very simple: they do not pay for it. So the barefoot doctor is, in every instance, a part-time individual, a red medical worker, a barefoot doctor. The training of these health personnel varies anywhere from a two-week course in medicine to a fairly extensive course in health care delivery systems, sometimes running as long as two years. They are young people for the most part and it is voluntary. They spend anywhere from an hour a week to fairly steady employment at their voluntary occupation. They are paid by the commune or by the production brigade in which they live and work, but they get no pay at all for their medical work.

Everyone knows who the barefoot doctor is and the barefoot doctor knows everyone in his area of concern. He or she also knows what their health problems are. The barefoot doctors deliver medicines to their "flock" and they really are the link between medical care and the individual. Through the barefoot doctor, the individual has access to the trained physician and there seems to be about one barefoot doctor for each 80 to 100 people. There are many neighborhood clinics, both in the cities and in the countryside, where young medical workers are trained.

They are using cytologic methods for the detection of esophageal cancer in Linhsien. This is one of the three earlies, the "earlies" being early detection, early diagnosis, and early treatment.

This is their formula for reducing the problem of esophageal cancer.

The barefoot doctor title is not really appropriate, for most of them are not barefoot. They are pretty intelligent, pleasant and for the most part young people. A doctor in China makes about \$33 a month, on which he gets by pretty well and dresses reasonably well. There are a lot of reasons why we went down into Linhsien county, which is really rural districts, and some things are going on there that look very much like our own Tennessee Valley Authority in the early 1930s when our area was trying to solve some of its problems.

A technique for the early detection of esophageal cancer is the use of a cytologic balloon. The barefoot doctor places a balloon down the throat of the individual, into the upper part of the stomach. This balloon has a net around it, and when the balloon is withdrawn, the cytologic specimens are studied by barefoot doctors particularly trained for this purpose. The procedure has been done on about 300,000 people. These health personnel go out into the countryside and start running people through the study programs. They do cytologic specimens by the hundreds. With the detection of early esophageal cancer, they are actually getting into the treatment of early cancer and the work is progressing. Carcinoma of the esophagus apparently does not run in families, but is thought to be related to the diet in these communities.

The barefoot doctor goes out into the field delivering medicine once a week, or even as often as once a day, to the homes of the people, and



This is the medical school at Canton; note the ever-present propaganda bulletin board, complete with propaganda posters.



Volunteer health workers in a community health clinic discussing the community health program with members of the American Cancer Society delegation.



Operation under acupuncture anesthesia. The surgeon's hands can be seen in the upper right, performing a left lobectomy. The patient is awake and responsive, with no positive pressure anesthesia. The operation is being performed by a resident at Peking Lung Hospital.



Clinic at the Capitol City Iron and Steel Works in Peking. The men are red medical workers, which are the equivalent of the barefoot doctors who function in the communes.

then he goes back to be sure they are checked regularly. The individual, then, somehow or other has a regular weekly contact with the health system.

There is a little book with instructions on handling foods, pickling vegetables, and the water system, which emphasizes that one must not eat the pickled vegetables, a staple of the diet in that county, because it has some sort of fungus in it. They have shown that pickled vegetables are a part of the carcinogenic pattern which produces carcinoma of the esophagus, so the barefoot doctors teach the people not to eat the pickled vegetables because they contain fungi. However, the carcinogen is probably related to the various types of nitrosamines which lie in their diet, especially in the pickled vegetables and in the great wealth of preserved food.

There are expeditions which go out collecting herbal medicines. I asked, "How can you tell when you have an herbal medicine?" The reply was, "Well, if it's got a name, it's a medicine, and if it doesn't have a name, it is a grass." This is as good a description as any of the way they experiment with their herbal medicines. There is a saying that just by sitting down in the field, you may with your seat cover three jewels.

I think these observations give you a little look at what's going on in the delivery of health care. The magnitude of the problem is downright unbelievable. But the educators have not sacrificed the teaching of the physicians and there

are physicians who are actively in training. We visited the medical school, looked at the curriculum, went over what they are doing, talked with many young people, and they are coming out all right. But they have to work for two years in the field or in the plant before they can be admitted to the medical school. When students finish medical school, they return and work with the people for another two or three years. The young physician can then apply for postgraduate training. There are very good, vigorously run postgraduate training programs. It was a much more aggressive program than we encountered in the Soviet Union, a program aimed toward getting something for everybody. Every patient gets treated, and they may be treated with acupuncture or they may be treated with herbal medicine.

One thing that I saw in the hospital which I completely missed in the Soviet Union was a smile. A friendly, affectionate sort of relationship exists between the doctors and the patients and the people themselves. I didn't see a single fight the whole time we were in China, so I said to one of the doctors, "I just don't understand how you all are so nice to each other." He said, "Well, that's the way people are supposed to be." I suppose that that's true and he is right.

I must emphasize that this is all at the price of personal freedom. There is absolute governmental control of all health industry and social activities. Nevertheless, these are all progressing and we must be aware of this old, but revisited neighbor.

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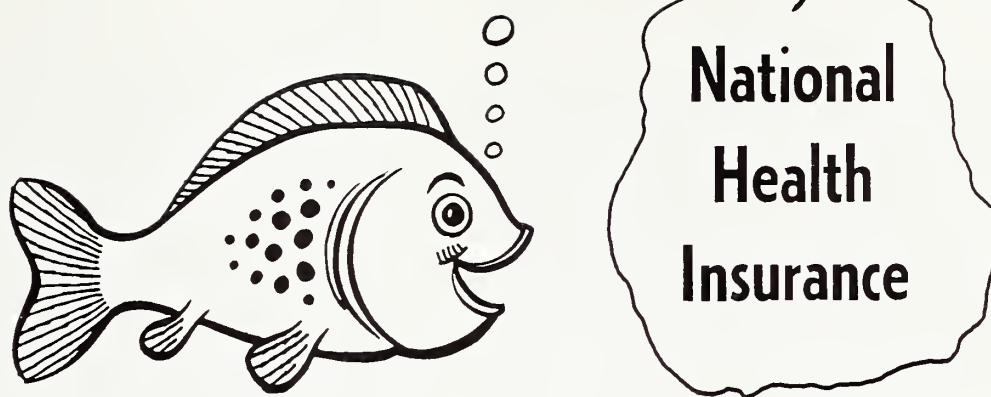
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J. H. SULLIVAN, M.D.

I would like to present a few facts, a few questions, and a few answers regarding the possibility of national health insurance for America. The facts are correct. We must disseminate this information to educate our citizens and forewarn them of this bureaucratic nightmare.

The tragic flaw in any federal, social, or health program is the bureaucracy formed which controls it. This usually comprises 20% to 50% of the total expenditure of these funds.

Social welfare spending hit an all-time high in 1976. The Department of HEW says that during 1976 social welfare programs cost the nation's taxpayers \$331 billion (\$45 billion more than it cost the same taxpayers in fiscal 1975). Social welfare programs in 1976 cost each American citizen—man, woman and child—\$1,760.19. In 1960 only 26% of the federal budget was spent on social welfare programs, but in 1976, 56% of the federal budget was spent on social welfare programs.

A very interesting statistic is that 6.6% of the income of the nation's families went toward total health care cost in the United States which totaled \$140 billion in 1976. This includes insurance, medicine, medical bills, hospital bills, glasses, dentures, etc. The taxes paid to the United States, state and local governments took 34% of the income of families of these United States.

Why do we have rising health care cost? No longer can Washington accuse us doctors of being some 50,000 short in numbers. Washington can-

not refute the peerless excellence of American medicine as compared to worldwide medicine. Washington cannot deny what the polls show, and that is that most Americans are satisfied with the quality and of the availability of their care. Rising costs are being exploited as an excuse for an all out move against the private practice of medicine and health care. We doctors are concerned about the cost issue, but contrary to the thinking of most politicians, we are not the culprit. The climb in cost is largely due to impersonal factors that far exceed the personal ability of any health care provider to control them. They are (1) growth and expansion of clinical competence and technology; (2) growth of health insurance and incentives to better care; (3) the relentless surge in professional liability premiums; (4) greater longevity and thus a greater incidence of chronic illness (in other words, you cure one disease, the patient lives longer and is certain to get a second disease process); (5) steady inflation; and (6) most important, the network of administration and procedural expenses engendered by federal involvement in health care.

Did you know that hospitals employ five times as many people as the automobile industry? (2 million people work in hospitals). Did you know what the impact of an increase in the minimum wage on hospital cost is? Raising the minimum wage in areas such as housekeeping, laundry, and kitchen also causes a ripple "effect" which raises salaries of other personnel to maintain a rational wage structure. A 30¢ per hour increase in 1974 of the minimum wage initially had an impact of \$29 million on hospital wages, but the ripple effect had an impact of \$450 million. Did you know that each hospital patient in the United

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States in 1976 paid an average of \$6 per day to cover malpractice insurance costs for the hospital? Did you know that one in three hospital employees has special training as opposed to one in seven people in industry?

When socialized medicine and national health insurance fails, as has happened in England and other countries, the blame will not fall on the government. It will fall on the physicians, hospitals, nursing homes, and pharmacists. National health insurance will bankrupt this nation just as surely as it has England. The private practice of medicine, like the private enterprise American system, is based on the principle that a person is entitled to what he earns and pays for.

The record of HMO or Health Maintenance Organizations in the United States is simply awful. Co-op health groups traditionally have administrative costs amounting from 50% to 97% of the total money available. National health insurance and HMO group medicine invites assembly line medicine. Liberal congressmen and politicians have ignored the overall rise in cost of living and basic cost of inflation which in essence is uncontrolled deficit spending by government itself.

The annual budget of HEW (which is a bureau determined to cut costs and transform American medical health care) is greater than the total cost of all health care in this nation today. If honest cost savings were the real issue, the greatest boon to the American citizen today would be the abolition not of the practice of private medicine, but rather the Department of HEW.

Let's think of catastrophic illness and insurance. Catastrophic illness insurance is thought necessary by many but when the facts are known it is a typical bureaucratic sham. A \$10,000 bill for the patient in the hospital is extremely rare. Three out of 1,000 patients have expenses over \$1,000 and 80% of these are either Medicare or psychiatric patients. A family of four in the 25-35 age bracket would pay \$52 a year to a private insurance company for a \$10,000 deductible catastrophic insurance policy. Studies by private insurance companies as well as by a government appointed study committee reveal that catastrophic national health insurance the first year would cost \$370 for the same family of four in this 25-35 age group. Where is the extra \$318 per year to go? To bureaucratic boondoggling.

If smarter brains could prevail, the cost of a

citizen's health insurance could be a direct tax credit against the federal income tax so that a taxpayer could deduct the entire cost from his tax bill. This would certainly be superior to the half-hearted deduction that now exists.

Any open-ended program such as national health insurance will encourage unnecessary utilization of benefits. If our medical system is indeed approaching a crisis due to rising costs, it is not because of the lack of government planning or intervention but rather because of the sheer weight of all government programs, regulations and paperwork they entail. A government that cannot even run a medical program for the poor and aged, or deliver the mail on time at a reasonable cost, can hardly call itself qualified to administer a national health insurance program. Of all the proposals for national health insurance, the overwhelming idea is to try to provide cost containment, but never once is mentioned the quality of medical care.

Our medical records can always be surveyed by the prying eyes of bureaucrats. The national health insurance PSRO standards will expose even your most private records to anyone in government. On a computer with your one big number will be your health record, any legal problems, income tax returns, bank accounts, parking tickets, court decisions, credit cards, financial statements, misdemeanors, licenses, and down the line.

The arrival of Mr. Carter at the White House with his ideas of national health insurance makes it more than ever necessary for Americans to see what can be learned from Britain's example for national health insurance. In seven years the number of administrative employees of the British health service increased almost twice, from 780 thousand to 1.3 million nonmedical administrative employees. British doctors say bluntly that their British National Health Service is on the brink of collapse. The British patient can see nothing very wrong, even though he has to wait a long time at a clinic and up to a year or more for nonurgent hernia operations. The reason for this is that the British people have never known anything else. They are accustomed to second class standards of medical service because it took 30 years for the superb medical care of Britain to demise. The truck with defective brakes and steering is no less headed for disaster in the early stages of its run downhill than when it crashes through the brick wall at the bottom.

But the truck was actually doomed from the start unless someone had managed to deflect it.

Even though Carter advocates national health insurance, Senator Kennedy is intent upon the passage of a bill that bears his name. Senator Kennedy has said that if anything else is passed for national health insurance other than his own health security plan, this country will wither and die. Senator Kennedy will not let a Georgia peanut broker take over his medical field.

The financing for national health insurance will amount to a political and financial nightmare. It is anticipated by the same actuary firm which studied catastrophic insurance programs that over \$130 billion in start-up funds would be needed for the first year of a comprehensive national health insurance.

HEW recently released the list of physicians who in 1975 received large sums of money. Of the first 112 doctors checked only 32 were correct as listed. One physician had retired 12 years previously and was listed as receiving

\$233,000. Another physician who had died in 1974, one year before the time period, was listed as receiving \$250,000. The list of physicians released by HEW has got to be one of the sloppiest performances in the history of American bureaucracy. If the AMA were to put out data this inaccurate the press would have us for breakfast and properly so. For this reason HEW ought to be held similarly accountable.

What can we do? First, education. We can inform the public by spreading the flaws of the cost and the bureaucratic nightmare of national health proposals. (2) We can encourage congress to repeal the PSRO and HSA laws and other social legislation programs and try to keep a right to privacy in our record keeping system. (3) We can court the press. It is so easy to be against something, but it is very difficult to stand up for something such as private enterprise, the private practice of medicine, the right to work, the right for freedom, and the right to be an American citizen.

1430 3rd Ave.
Columbus, GA 31901

PROCLAMATION OF FIRST THANKSGIVING

Whereas it is the duty of all nations to acknowledge the providence of Almighty God, to obey his will, to be grateful for his benefits, and humbly to implore his protection and favor; and whereas both Houses of Congress have, by their joint committee, requested me to recommend to the people of the United States a day of Public Thanksgiving and Prayer, to be observed by acknowledging with grateful hearts the many and signal favors of Almighty God, especially by affording them an opportunity peaceably to establish a form of government for their safety and happiness.

Now therefore I do recommend and assign Thursday, the twenty-sixth of November next, to be devoted by the people of these States to the service of that great and glorious Being, who is the Beneficent Author of all the good that was, that is, or that will be; that we may then all unite in rendering unto him our sincere and humble thanks for his kind care and protection of the people of this country, previous to their becoming a nation; for the signal manifold mercies, and the favorable interpositions of his providence, in the course and conclusion of the late war; for the great degree of tranquility, union and plenty which we have since enjoyed; for the peaceful and rational manner in which we have been enabled to establish Constitutions of Government for our safety and happiness, and particularly the national one now lately instituted: for the civil and religious liberty with which we are blessed; and the means we have of acquiring and diffusing useful knowledge; and, in general, for all the great and various favors, which he has been pleased to confer upon us.

And also, that we may then unite in most humbly offering our prayers and supplications to the great Lord and Ruler of Nations, and beseech him to pardon our national and other transgressions; to enable us all, whether in public or private institutions, to perform our several and relative duties properly and punctually; to render our National Government a blessing to all the people, by constantly being a government of wise, just, and constitutional laws; discreetly and faithfully executed and obeyed; to protect and guide all sovereigns and nations (especially such as have shown kindness to us), and to bless them with good governments, peace and concord; to promote the knowledge and practice of true religion and virtue, and the increase of science, among them and us; and, generally, to grant unto all mankind such a degree of temporal prosperity as he alone knows to be best.

George Washington
President, United States of America
For Thanksgiving Day, 1789

The Rising Cost of Health Care

The Health Services "Crisis"

—Reality or Fantasy?

August 18, 1977

Leonard B. Victor, M.D.
Chief of Clinical Pathology and
Director of Clinical Laboratories
City of Memphis Hospitals

Dear Dr. Victor:

As you are no doubt aware, one of the major goals of the Carter Administration during this session of Congress is the passage of the Hospital Cost Containment Act, which would attempt to bring the skyrocketing increase in hospital costs under control by imposing limits on the amount of increase of hospital revenues over those of a base year.

The Senate Finance Committee last week reported its version of the bill to the Senate floor, and the House Ways and Means Health Subcommittee will resume its consideration of the bill when the current District Work Period ends in September. As a member of the Health Subcommittee I would like to have the benefit of your views on hospital cost containment legislation so that I may better represent the interests of the people of Memphis on this important issue.

I look forward to hearing from you soon.

With every good wish,

HAROLD FORD
Member of Congress
8th District, Tennessee

September 27, 1977

Dear Mr. Ford:

Thank you for your recent letter asking for my thoughts on the rising costs of health care.

In the past, very low employee salaries have subsidized health care; in effect, the hospital worker donated part of his services to the patient. Now, widespread annual union (or guild)

negotiations have resulted in pay scales more nearly equal to the other labor-intensive areas of the economy—but someone must pay for the workers' wage increases. Is it reasonable to limit one group of voters' income, and not others, by a ceiling on City of Memphis Hospital (CMH)?

Production-line efficiencies are slow in coming to labor-intensive health services; but, as the effi-

ciencies of McDonald's in fast-food services demonstrate, with more capital formation and more managerial skill, this is possible. That is not to say capital is always spent wisely when close-by services are duplicated rather than shared; however, if you are to automate and computerize, you must spend the money to automate and computerize first, in order to be more efficient later—but someone must pay for the process.

Cancer is not just one, but many diseases; the cure(s), if any, are diverse. The same is true of "infections." Neither are hospitals alike—they, too, are diverse. No single (simple) way of thinking about them will resolve complex issues. An arbitrary limit ("cap") on one may force another to close its doors (and not necessarily the least needed). What will happen if a national "flu" epidemic really hits? Expenses will truly "skyrocket"—but nobody can preplan crises or budget in advance that closely.

A teaching hospital of a medical school (health sciences center) has the most complex situation of all. Only in it do medical (and other) students, interns and residents learn to become satisfactory practitioners of the healing arts. Education is inefficient, probably in part because of the need to make students think carefully about each patient, on a one-to-one student/teacher basis. Since no two patients are quite alike, biological predictions are difficult and much exposure to variety is required. (This is why protocols for making the care of the patient more routine have been slow to be developed and widely implemented.)

Clinical research to bring medical advances to general patient treatment is another area where careful medical study requires much greater expense. And often patients with more complex, or with multiple problems come to university hospitals. With ceilings, other hospitals may well refer the most expensive cases to CMH, thus again placing intolerable burdens on CMH. The quality assurance there (and in many community hospitals) is high—partly because of the academic and professional environment (self-discipline), and partly because of consumerism and occasionally justified governmental regulations at all levels (external discipline)—but this is expensive, and someone must pay for it.

Also, part of quality assurance, for example, includes autopsies—almost an ultimate quality control. But, as you know, few are happy with the current situation—it is very time consuming,

there are delays in funerals, and the cost is high (about \$600); for this effort, payment is infrequently available. Yet as an experience for learning, efficacy of treatment ("outcome"), and continuing education, the autopsy is often without equal. Yet it is the rare reimbursement formula that includes it.

It has aptly been said that at the time of the early development of the polio vaccines a generation ago, if bureaucratic regulations had existed then as they do today, the nation would now still have 25,000 or so cases a year (instead of 10 last year), and *perhaps* a portable and compact "iron lung" run by a microcomputer (as expensive as an automobile)! Truly, the savings of vaccines today simply cannot be calculated—but someone must pay for this initially, and there is no equation that can say "if we spend one billion dollars, we will have *the* useful answer."

Your letter implies that the costs of health care are "skyrocketing." They *are* going up, but not as much as coffee, sugar, legal costs, energy, insurance, and many, many other prices in recent years. When we transfuse blood, we are required now by law to test for one type of hepatitis. Add on 10% just for that alone. It's worth it, but someone must pay for it. I am (have always been) in the lowest risk malpractice category, but my cost for that has gone up about *ten* times these past three years alone! The money must come from somewhere.

We now must spend about 25% of our CMH Laboratory expense budget on quality assurance and compliance with bureaucratic forms and regulations; CMH itself is regulated by more than 160 separate agencies, bureaus, and departments. They are proliferating faster than one can keep track of them—and someone must pay for these very expensive added labor costs.

The CMH Laboratory now has a chemical analyzer that can do routine batches of chemical tests semi-automatically at a charge of about one-fifth (20% of!) that of the test previously performed laboriously by hand—a blood sugar, for example. However, the equipment costs a quarter of a million dollars, versus much less for a simple instrument which uses a lot of labor. Someone must pay for this, just as they must for tests done on nights, weekends, and holidays if personnel must be called in, paid overtime, or given "inducement pay" to work when few others in our society want to.

As more sophisticated and more informative

laboratory tests are introduced, using expensive radioactive techniques for example, we eliminate older, less accurate, and "cheaper" methods—but demand goes up because the newer tests better identify patient problems and often earlier in the medical work-up. But, as we have learned to treat many acute pneumonias inexpensively and often without hospitalization by antibiotics, people are living longer to develop chronic diseases that are now even more complex to diagnose and to treat or control. And somebody has to pay for these improving health services. Demand for clinical laboratory tests, for example, has historically risen about 15% per year at CMH.

"No wonder the voter has not indicated an intense desire to alter our health care system! The public *expects* to continue receiving improved services the system now offers—and *also* that the quality of these services will constantly be better, if not cheaper."

Fact: "Americans are living longer. Life expectancy is now an average of 72.5 years, even for men."

Fact: "In 1931, low-income persons visited a doctor 2.2 times annually; by 1964, 4.3 times; and in 1975, 6 times (1.9 times more than high-income persons)."

Fact: "In 1960, 25 infants died per 1,000 live deliveries on the average; in 1976 the number was 16 per 1,000 (a decrease of 38%)."

Fact: "In 1960 there were 37 maternal deaths per 100,000 population; in 1975 the comparative number was 11 (a decrease of 71%)."

Fact: "In 1960, 761 Americans died per 100,000 population; in 1975 the number was 642 (a decrease of 14%)."

Fact: "Ten of the first 15 causes of death in the USA are down significantly over the last 12 years."

"The dialogue on health care led by the Carter administration has focused solely on costs and, thus far, has been truly unbalanced by not highlighting concern with improving services. In introducing the concept of controls, the administration implies that our health care system is unconcerned about costs and is both wasteful and inefficient across-the-board."

While the idea to reward incentives for cost-containment will be useful as a performance-based reimbursement plan, the significant danger (based on observation of existing or previously

tried plans) is that this year's savings will result in a smaller allowable budget the next year. It thus won't be more than several years before institutions become so sickly and emaciated themselves, with no reserves for improvements, that most all institutions will then have to become federalized in order to stay open—such as being absorbed by the VA system.

Persons in health services are perhaps victims of their own magic aura of success. Expectation (demand) for health services has reached the point where now the public usually does not feel its own responsibilities because of the variety of pills and "shots" available.

Yet the most dramatic reduction in costs can be made, over the long term, by some very inexpensive preventive measures taken by each and every one of us:

1. Avoidance of more than a small glass of alcoholic drink every few days;
2. Avoidance of high-fat foods; (french fries are devastating);
3. Avoidance of smoking;
4. Avoidance of high calorie and unbalanced food intake; for example, drinking alcohol is like drinking liquid fat;
5. Some *meaningful* exercise every day; and
6. Responsible driving, boating, swimming, and handling of guns.

Prevention is the Key!

If each one of us does *not* assume responsibility for our own health (and that of our families), should the average taxpayer? In that context, are noncrisis (such as alcoholic cirrhosis) health services a "right" or a privilege (as against pneumonia or cancer, for example)? And what about the tremendous reservoir of emotional problems in society that is not, even now, being taken care of? Should this also be a medical service to be reimbursed by the average taxpayer/voter—a "right"? And to what limits?

As hospitals have converted from large wards to private and semiprivate rooms with baths, with menus that are varied and perhaps even appetizing, somebody must pay for the costs of comfort we all are desirous of—but by doing without *other* expenditures!

It is said that in our society expectations are rising because of the influence of movies and television—it is human nature to want steak instead of hamburger, or shrimp instead of tuna fish, if you can afford it, or if *somebody else* (the voter/taxpayer) pays for it. If you are sick, you natu-

rally want the best possible medicines and treatment available *immediately and regardless of cost*. If you need your gallbladder removed, you do not wish to wait a year or more to get into a hospital (as in Britain). Yet life prolonged by machines for any length of time costs tens of thousands of dollars per person—such as for dialysis or for life support for brain damaged patients. Shall we say that only the rich shall have this, or cancer treatment—with its ever more expensive machines for diagnosis and treatment? I am, of course, pointing out some moral dilemmas associated with economic controls by *any* level of government, and stressing the factor of choice.

Local? Take the CMH—for years, suffering from grossly inadequate funding because of “taxpayer considerations” (and no doubt because of its particular patient population), *just* beginning to match the quality of the “private” hospitals in Memphis. A ceiling will stop that equalization cold.

State? Take the mental hospitals—literally human warehouses, as are prisons, rarely known for excellence in any kind of services.

Federal? The VA *system*, the *system* of military medicine, and other areas of health expenditures are no models (with rare exceptions). But then, neither are Amtrak, the Post Office, the Armed Forces, nor the ICC examples of federal efficiency. And what about the proposal to nationalize funeral homes because of the “high cost of dying”? Should there be a ceiling on funeral expenses because “people can’t afford it anymore”?

Can bureaucracies do better with health services? The record is obviously not now, and never has been encouraging! Paternalistic control of one segment of society by a federal bureaucracy is not likely to have happy results any more than wage and price controls have ever been effective for more than the very short term. Indeed, most Western economists argue that *fewer* controls and *more* competition keep prices from rising, and drive the inefficient from the marketplace.

To argue that health services are, in fact, similar to a single utility providing electricity or telephone services to a given geographic area is to play down the importance of the individual’s choice with regard to something so ultimately personal as one’s own health. There are, in fact, more parallels with systems of public education and of religion than with telephones and electri-

city.

As Americans are more often abandoning their parents and grandparents to institutionalized services or simply to lonely squalor, the increasing numbers of elderly persons (who are much more prone to truly need more complex health services) mean that our society must reexamine what it *wants* to afford, from a base of what it *can* afford! Trade-offs extend to many things, including retirement age, social security, generous civil service pensions after only 20 years of work, the costs of new weapons, and so on. Of course health/illness costs are rising—large segments of our population have never been able to afford adequate health care before—and to bring these groups (farm laborers, “illegals”) into the mainstream is *very* expensive.

To place controls only on health services instead of comprehensively studying the total economic/societal picture will thus distort and penalize one area because of deficiencies in many other areas of our society. A total plan for regionalized health (including dental and mental) services will need to include *real* incentives to efficiency and to cooperation, but also needs to maintain enough competition by enlightened self-interests to moderate the current increased proportional growth of health services to the gross national product.

Can we no longer afford “health,” but yet the greater expenditures for alcohol, tobacco, and cosmetics? Or “modern” big warships at a billion or more dollars *each*? Or expensive new tanks that hardly work? Why should the military not be penalized for gigantic cost overruns, and yet other areas of society be taken to task for rising costs?

In sum, the above discussion is used to illustrate “complexity theory,” which asks: Who pays for changes toward the greater complexity of the division of labor? The types and supply of services (and goods) are changing (and growing), often in revolutionary ways. Instead of inflation, we have *conflation* of old pricing with the new prices and taxes that have *diffused* into a *redis-tributed* system.

One hundred years ago, it cost an individual \$0.13 to stay 24 hours at what was then CMH. Few people could really afford it even at that time. Today, it costs enormously more—with the explosive change in the division of labor that we call health services—which a very large percentage of persons, through various mechanisms (pay-

roll deductions, taxes, etc.) *can* afford.

What has happened is that a larger "pie" is being differently distributed. And an army of federal and state employees who do not deliver actual health services (HEW, Medicaid, etc.) now have to be paid for also by taxes. Health services has grown into one of the largest sections of our economy—employing many more persons not only at the lowest wage levels, but in new disciplines, and at different educational levels than formerly. Health services now include not only sick care but "well" care, social welfare services, counseling, and more.

What we are seeing here is a combination of redistributing payments from other sectors, and a pass-through of the costs *diffusing* through all sectors: **CONFLATION**.

When the price of sugar, and also of coffee and beef hit record highs, the consumer reduced consumption and the prices came down. No federal tampering was required.

When the consumer feels that the price of his taste in autos is too high, he will shift from heavy and fancy models to efficient, small economy models. No federal tampering is required; no "cap" in auto prices is talked about.

When the consumer feels he can no longer afford luxury medicine, he will ask his advocate (the doctor) to admit him to, and his insurer only to pay for, a bed in a 4-bed suite in a hospital as a last resort if he cannot be treated or diagnosed in a day-facility, with home health care, in prepaid clinics, or in other ways if his case cannot be handled in an office (of health services). Or, the patient may seek out semi-independent physician's assistants or nurse practitioners. All of these alternatives are now evolving—without government tampering.

Even the educational system must change to strongly emphasize preventive health measures from first grade *through* high school. (Remember, that is another division of HEW!)

In order to pay for the things one wants, one *must* buy many things not wanted—rockets, basic research, unemployment benefits, tobacco subsidies, vast highway systems, big factories—through taxes and "profits." Tampering with any causes many shock waves throughout the entire interdependent economy, despite the best of intentions. It should be quite clear that a ceiling on the health services sector means a deliberate return to simpler times (stagnation) in comparison to an advancing society—the redistribution,

in effect, to governmental payrolls, to armaments, to oil sheiks, or whatever else may seem to be the priority of the day.

What all this says is that we must realize the choices of paying for chopped sirloin versus sirloin steak, served on paper versus china plates, accompanied by paper knives, forks and napkins or by silverware and linen—and also the waiter who tends to ignore versus the one who hovers. And if we choose to pamper ourselves when we are sick, does that also require federal tampering? Or yelling that the costs are "too high"? Compared to what? And what would the savings be otherwise spent for? . . .

Having reviewed, then, a few considerations that show a proposal such as a (9%) cap on hospital expenditures to be unduly simple and penalizing to workers and health services professionals of all kinds (nurses, technicians, physicians, therapists, etc.), there are a few suggestions for re-directing priorities which do seem available.

1. Health facilities should be prohibited from creating demand for their services, however laudible the goal of filling empty beds. Advertising is expensive. For example, Sunrise Hospital of Las Vegas is said to have a \$10,000 per month sweepstakes advertising campaign offering anyone (or next-of-kin!) a chance to win a Mediterranean cruise for two if the patient checks in on a Friday or a Saturday. Contrast that with the statement by the Michigan Blue Cross/Blue Shield that "Surgical patients stay approximately four days *longer* in the hospital," (for the same diagnostic category), "if admitted on weekends."
2. Health does not depend on the calendar. Health facilities (like churches and schools) are not well utilized. Aside from habits and sleep patterns, health facilities could operate the same way, every day of the week, around-the-clock—but incentives will be needed.
3. For equivalent services, nonprofit facilities should be held to the same standards as for-profit facilities, including payments in lieu of taxes and compliance with *all* regulations.
4. Expensive duplication of regulations, inspections, and accreditations by federal, state, local and "self-regulating" professional organizations should be eliminated by formulating a single standard to which *everyone in a given category must adhere*, including federal, state and county hospitals and health departments (the latter often making regulations for every-

one but themselves—either deliberately or by legislative exemption). This would be better done by professional organizations, and *spot-checked* for quality control by *one* federal agency nationwide.

5. Real fraud in current programs should be prosecuted with vigor before still more “remedial” legislation is enacted. This needs to be balanced with legislation forcing the removal of a bureaucrat from civil service protection, from his office, and from the public payroll, if misleading information is released for publicity. *Responsibility is a two-way street.* For example, to say or imply that because an individual receives more than \$100,000 in Medicare and Medicaid payments in a year for a large office or clinic operation, that he is suspect, is to damage the professional reputation of that individual. Why should the civil “servant” escape a responsibility for truth and accuracy, instead of being truly responsive to the real world?
6. The concept of vertical and horizontal consolidation of health facilities should be encouraged, to include health maintenance, mental health (behavioral and emotional problems), dental health, home health, extended care, regional laboratories, etc. For example, if three hospitals each have two-thirds occupancy rates, they may be consolidated into two, with the oldest being converted to other uses. This will be encouraged if health facilities are given the requirement to reapply for

their charter (and their existence) every four years to a broad-based regional health services agency, for example. In this way, some competition could be preserved, while regionalization and rationalization of health services would be promoted.

There needs especially to be real accountability of the virtually untouched, often conflicting and self-serving “nonprofit” agencies and institutions, which appear to be typically accountable only to their own “internal” and self-renewing boards of directors/trustees (even though many do a reasonable job in a small, but often overlapping area).

7. Finally, it would seem worthy to try “health stamps,” perhaps in the Memphis region. By paying *something*, and thus feeling responsibility (varying with actual income of family unit), individuals could use “health stamps” to buy care where they feel they get the best services—be it a prepaid plan, a medical center, a home health agency, a doctor’s clinic, a “women’s” clinic, a physician’s private office, or a public or private hospital.

I do hope this discussion makes clear some points about health services; if not, please feel free to get in touch for further discussion.

Thank you for your interest.

Sincerely,
Leonard V. Victor, M.D.
Chief of Clinical Pathology and
Director of Clinical Laboratories



"Coffee break."

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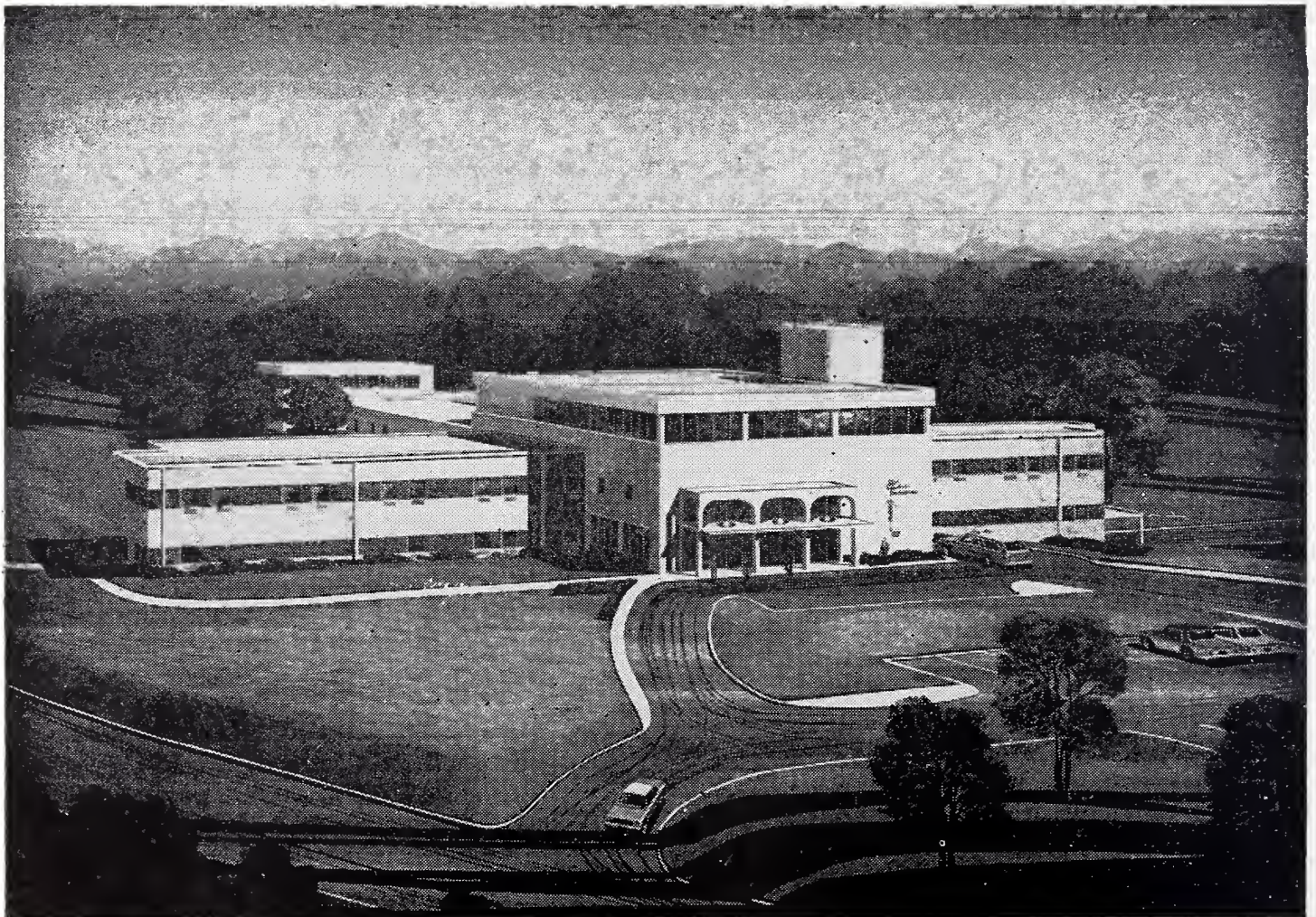
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Gamma Glutamyl Transpetidase in Liver Disease

JOSEPH J. SANNELLA, M.D.

This enzyme is also known as gamma glutamyl transferase. With either name, it can conveniently be abbreviated with the letters GGT.

GGT catalyzes the transfer of glutamyl groups between peptides or L-amino acids. It is abundant in kidney, pancreas, liver, and prostate but elevated serum levels seem to be largely confined to hepatobiliary or pancreatic disorders.

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

The enzyme is found in bile canaliculi, the luminal borders of the bile duct epithelium, and within the hepatocytes in the periportal zone. It provides a sensitive screening test for liver disease and is superior to the transaminases, alkaline phosphatase, and 5' nucleotidase in this respect. In fact, liver disease is not likely to be present if GGT is not elevated.

Since the enzyme is inducible by certain drugs

Continued on page 831

FIGURE 1

DISEASE	Average Enzyme Increases Beyond Normal				
	SGOT		SGPT	ALK PHOSPHATASE	GGT
Acute Viral Hepatitis	20-50x	<	20-50x	less than 2½x	5x
Infectious Mononucleosis	less than 5x	<	less than 5x	50% show slight elevation	5x
Drug Induced Hepatitis	2-25x	>	2-25x	normal	5x
Chronic Active Hepatitis	less than 10x	<	less than 10x	2½x	7x
Chronic Persistent Hepatitis	less than 10x	<	less than 10x	less than 3x	7x
Cirrhosis (Alcoholic, Post Necrotic, or Cryptogenic)	75% are less than 5x; remainder normal	>	50% are less than 5x; remainder normal	more than 50% are normal	over 90% show 5 fold elevations
Biliary Cirrhosis (Primary or Secondary)	7-8x	=	7-8x	5-10x	20x
Cardiac Cirrhosis	less than 2x	>	less than 2x	less than 2x	80% show 5x
Extra Hepatic Cholestasis	2-3x	<	2-3x	85% are greater than 2½x	10x
Intra Hepatic Cholestasis					
Viral	more than 5x	<	more than 5x	more than 2½x	10x
Drug Induced	less than 5x		less than 5x	more than 2½x	10x
Acute Cholecystitis without obstruction	less than 8x		less than 8x	more than 2½x	10x
Neoplasms					
Primary Hepatic	80% are less than 8x; 20% normal		60% are less than 8x; 40% normal	90% are less than 4x; 10% normal	100% show elevations averaging 15x
Metastatic	only 50% show elevations		not useful	80% show 2x; 20% normal	100% show elevations averaging 15x

NOTE: The symbols > or < between SGOT and SGPT indicates which is likely to be more elevated.

W. BARTON CAMPBELL, M.D.

A 65-year-old man was admitted to the hospital with severe "squeezing" mid chest pain of some two hours' duration. This was accompanied by nausea and diaphoresis. He had a history of hypertension of several years' duration for which he had sporadically taken medication.

The physical examination revealed an uncomfortable, slightly ashen, obese white man. There were bilateral basilar rales. An S_4 gallop was audible. There were no murmurs. An electrocardiogram was taken (Fig. 1), showing normal sinus rhythm at a rate of 69 per minute. The PR interval is normal at 0.17 seconds. There are Q waves in leads II, III and AVF. The ST segments are elevated in leads III and AVF and the T is inverted in lead II. This finding is diagnostic of inferior wall infarction of indeterminate age. Note that the P waves are inverted in V_1 and V_2 . There is a P duration of 0.12 seconds in standard lead II. The R wave in AVL is 12 mm in amplitude. The R wave in V_5 is equivalent to 5 mm of amplitude. (The V_4 , V_5 , and V_6 are half standardized.) The T waves are asymmetrical and notably inverted in I, AVL and V_4 through V_6 .

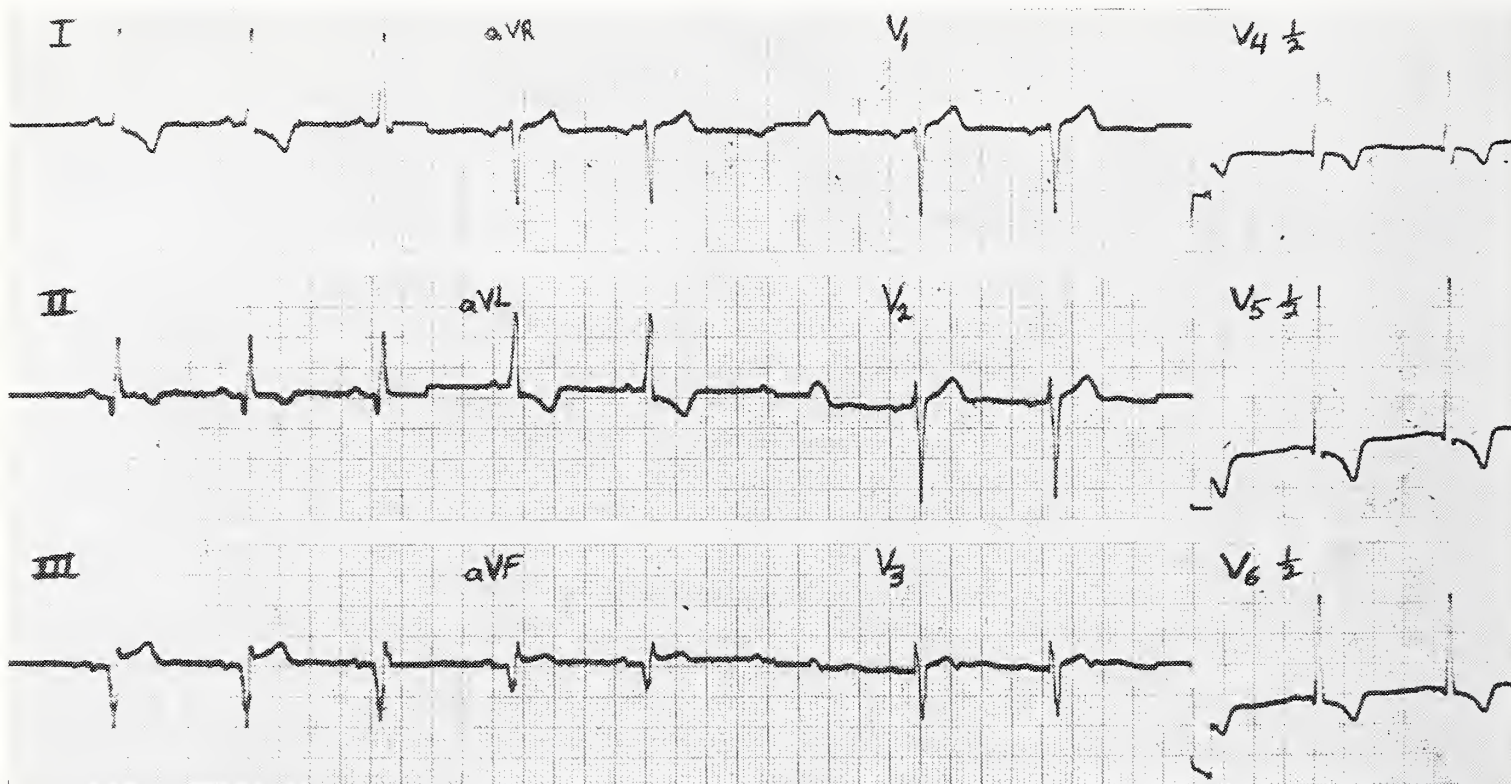


Figure 1

Many sets of criteria have been proposed for the diagnosis of left ventricular hypertrophy. In general, those criteria which have been most specific (fewest number of false positives) have

lacked sensitivity. Conversely, those criteria which have been most sensitive have included a proportionally greater number of false positives. The point score system proposed by Romhilt and Estes appears to represent the best compromise between specificity and sensitivity in the diagnosis of left ventricular hypertrophy.¹ The point score system outlined by Romhilt and Estes include the following:

- | | Points |
|---|--------|
| 1. <i>Amplitude of the QRS Complex.</i> | |
| Positive if any one of the following is present: | 3 |
| a. Largest R or S in the limb leads ≤ 20 mm | |
| b. S_{V1} or $S_{V2} \leq 30$ mm | |
| c. R_{V5} or $R_{V6} \leq 30$ mm | |
| 2. <i>ST-T Segment.</i> Positive if the left ventricular strain pattern with an ST-T vector opposite to the mean QRS vector is present: | |
| Without digitalis | 3 |
| With digitalis | 1 |
| 3. <i>Left Atrial Involvement.</i> Positive if | |

From the Department of Cardiology, St. Thomas Hospital, Box 380, Nashville, TN 37202.

the P terminal force in lead V_1 is abnormal.

- | | |
|---|---|
| 4. <i>Abnormal Left Axis Deviation.</i> Positive if the electrical axis of the QRS complex is -30° or more. | 3 |
| 5. <i>QRS Duration.</i> Positive if the QRS duration is >0.09 seconds. | 2 |
| 6. <i>Intrinsicoid Deflection.</i> Positive if the intrinsicoid deflection in lead V_5 or V_6 is >0.05 seconds. | 1 |

Definite left ventricular hypertrophy is present if the point score is 5 or more. Probable left ventricular hypertrophy is diagnosed if the point score is 4.

This tracing would be diagnosed by Estes and Romhilt as representing left ventricular enlarge-

ment. There is a R wave in V_5 in excess of 30 mm. The patient is not on digitalis and has marked ST-T changes. The inverted T wave in V_1 represents another 3 points. The patient does not have abnormal left axis deviation. An intrinsicoid deflection in lead V_6 is .06 seconds and the QRS duration is .10 seconds. The presence of an R wave in lead AVL of 12 mm or more appears to be highly specific with a diagnosis of left ventricular enlargement. This criterion alone, however, is greatly lacking in sensitivity.

Final Diagnosis: (1) Inferior wall infarction of indeterminate age. (2) Left atrial enlargement. (3) Left ventricular enlargement.

REFERENCE

1. Romhilt, DE, Estes, EH, Jr: A point score system for the electrocardiographic diagnosis of left ventricular hypertrophy. *Am Heart J* 75:752, 1968.

Laboratory Medicine . . .

Continued from page 829

(dilantin, phenobarbital, glutethimides), elevated levels must be interpreted with such therapy in mind. Alcohol is capable of producing induction, and elevated GGT is found in over 80% of heavy drinkers or alcoholics. Serial studies are most useful in monitoring alleged abstinence or identifying occult alcoholism. Once again, the test is much more sensitive than the transaminases in establishing the presence of alcoholic liver injury.

The GGT is also very useful for establishing

the tissue of origin when alkaline phosphatase is elevated. Normal GGT would exclude the phosphatase increase as being from hepatobiliary origin.

Figure 1 contrasts expected changes in the transaminases, alkaline phosphatase, and GGT in some common hepatic disorders. It can be seen that in general, the GGT provides the same information as alkaline phosphatase. However, because it is a more sensitive indicator of hepatic injury, borderline cases may be less equivocal. This is especially true when hepatic metastases are under consideration.

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Advances in Echocardiography

ROBERT L. BELL, M.D.

Following the introduction in 1954 of ultrasound techniques to record movement of heart structures, echocardiography has steadily improved. By 1970, it became well established in several cardiac centers and now, in 1977, it is well established as a routine diagnostic modality throughout the United States.

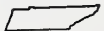
Classical echocardiography, or M-mode echocardiography, involves the examination of spatial movement of cardiac structures in one dimension as time progresses. Resolution is excellent and the diagnosis of valvular diseases of the heart (particularly mitral and aortic valves) has been well established. Other structures are also well visualized (pericardium, interventricular septum, posterior left ventricular wall, and left atrium) and many disorders of these structures can be appreciated. However, echocardiography has not rested on its laurels, but instead has turned the corner and is exploring new avenues.

The new avenues of interest in echocardiography are (1) cross-sectional or real time echocardiography and (2) pulsed doppler echocardiography.

The cross-sectional or real time ultrasound examination of the heart is like B-mode ultrasound of the abdomen and unlike M-mode studies in that it allows a two-dimensional image of anatomic structures to be reconstructed and visualized on an oscilloscope or TV screen. However, it differs from the classical B-mode methods in that data acquisition is so rapid that two-dimensional movement of all the structures in a single plane can be appreciated in a fraction of a second. This allows the plane to be reexamined

so frequently that motion picture images can be acquired. With stop action frames in systole or diastole, one can measure cross-sectional areas and better appreciate wall motion. Furthermore, motion of the same structure as it moves through several planes can be appreciated (this is particularly important with a prolapsed mitral valve). Resolution is so good that papillary muscles are usually seen and the main coronary arteries may occasionally be seen. This methodology is like a marriage of cineangiography and tomography. Whether mechanical sector scanners, sector scanners with electronic focusing, or linear array scanners will be the most effective real time scanner for the heart is still not unequivocally established. Several commercial units are currently available.

Pulsed doppler echocardiography allows characterization of velocity pattern of blood flow at specific locations in the heart and great vessels. The informational format is both auditory and visual (i.e., turbulent flow patterns are heard at specific locations as well as visualized graphically, and related to EKG and echo patterns). Mitral regurgitation and aortic insufficiency can be diagnosed with greater sensitivity and specificity than is possible with standard echocardiography. This technique also permits localization of a ventricular septal defect in 90% of children with this disorder and localization of atrial septal defect in 66% of children with this disorder. In addition, tricuspid and pulmonic valves are more easily identified through the use of pulsed doppler echocardiography and abnormalities of flow across these valves can be appreciated.

Both real time ultrasound and pulsed doppler echocardiography are impressive recent technical advances in the study of heart disease. 

From the Department of Nuclear Medicine and Ultrasound, Park View Hospital, Nashville, TN 37203.

STEPHEN L. GAMMILL

The patient for presentation is a 65-year-old man who complained of abdominal pain. He also complained of pain in his legs. He had been a heavy drinker for many years. Physical examination was normal. Workup included upper GI series, barium enema, excretory urogram, bone scan, glucose tolerance test and peripheral arteriography, all of which were normal.

The diagnosis of peripheral neuropathy was made and body scan was performed for evaluation of the abdomen.

Please examine Figures 1 and 2 and choose the best diagnosis. (The stomach and duodenum were filled with contrast material prior to scanning.)

1. Carcinoma of the pancreas
2. Pseudocyst of the pancreas
3. Splenomegaly
4. Retroperitoneal lymphadenopathy

Discussion

Note in Figure 1 that a mass is present in and around the tail of the pancreas with a smooth, round, relatively radiolucent component within it. This relative radiolucency is caused by fluid contained in a pseudocyst of the pancreas. As pseudocysts seldom occur in conjunction with carcinoma of the pancreas, that diagnosis may be excluded. The spleen is not enlarged, so you may eliminate splenomegaly. One would expect enlarged retroperitoneal lymph nodes to be visualized as relatively opaque oval opacities usually located in and around the aorta and near the midline, so you may discard that diagnosis.

At operation, the tail of the pancreas was enlarged and irregular. Much fibrous tissue surrounded it and was adherent to the spleen, stomach, and mesentery. The mass contained a pseudocyst. The tail of the pancreas and the pseudocyst and spleen were resected in toto, and the patient recovered satisfactorily. Pathologic diagnosis was pancreatitis with pseudocyst formation.

This case demonstrates several salient points. First, a large lesion can escape detection by standard radiographic means, such as upper GI

From the Department of Radiology, Baptist Memorial Hospital, Memphis, TN 38146.

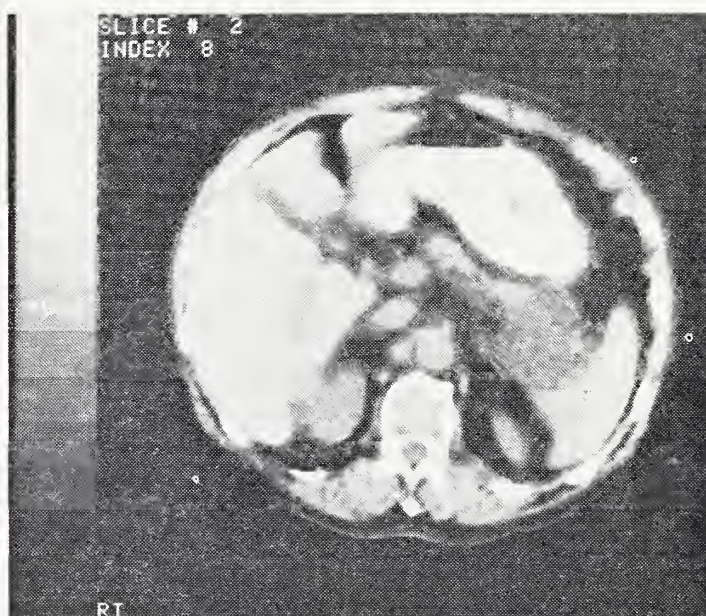


Figure 1

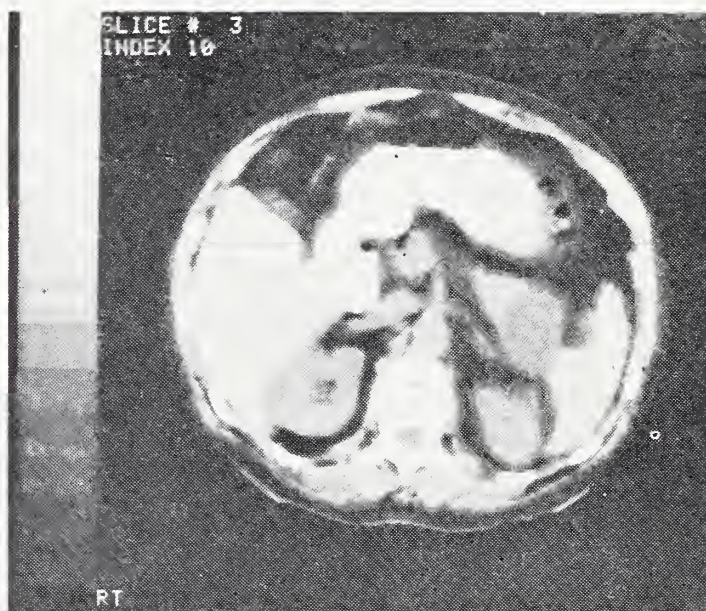


Figure 2

series, barium enema, and excretory urography. Even though this mass was quite large, it was not palpable. Ultrasonography would probably have detected the mass, but the computerized tomogram offers a higher degree of specificity in arriving at the diagnosis and in evaluating the lesion for planning the operative procedure. Note in Figures 1 and 2 that the pseudocyst is clearly visible and that it is adherent to the hilum of the spleen and splenic blood vessels. This offers valuable information to the surgeon in that he will be alerted preoperatively that he must remove the spleen along with the mass in the pancreas and the pseudocyst.

Answer: Pseudocyst of the pancreas.

Public Service Employment Utilized In State Facilities

Presently the Tennessee Department of Mental Health and Mental Retardation utilizes 103 public service employment jobs in five of its eight facilities. These programs are funded under Title II and Title VI of the Comprehensive Employment and Training Act made available through the U. S. Department of Labor.

The CETA programs are necessitated by the current increase in unemployment and are designed to have immediate impact at the local level by benefiting both the unemployed and low income levels outside the major metropolitan counties. Groups most in need of the services provided by CETA are veterans, minorities, women, older workers, welfare recipients, and the handicapped, and efforts are being made to employ substantial numbers from these segments of the population.

The goal of the CETA programs is to reduce the high unemployment rate through federally subsidized jobs and to further seek unsubsidized employment for program participants. Since the program's beginning in September, 1977 the Department of Mental Health and Mental Retardation has transferred 170 participants to regular state employment. The Department has 82 regular CETA II and VI positions which are being used to provide additional direct care to residents and to provide maintenance and custodial services.

On July 1, 1977 a CETA Title VI Special Project was established at Clover Bottom Developmental Center. This project is entitled "Project Care" and will employ 21 participants. Project Care proposes that mentally retarded children can learn from their nonretarded peers and that the nonhandicapped children's under-

standing of the problems of the handicapped will be enhanced if the children are served in an integrated program.

The project will consist of two program components which are presently in the implementation stage.

The first is the child care component, which will serve approximately 60 preschool age dependents of Clover Bottom Developmental Center employees. A program of day care, socialization, and preschool training experiences will be provided to 30 children of day shift employees and 30 children of second shift employees.

The second component will be a preschool and infant program serving 12 mentally retarded preschool children who are currently enrolled at Clover Bottom and/or children from the local community.

After a three-month period of development and stabilization of each program component the programs will begin to phase together to an integrated program for handicapped and nonhandicapped.

The major goals of this program are (1) attainment of improvement in socialization, self-help skills, and learning experiences appropriate to the individualized needs of each handicapped child enrolled; (2) decreased absenteeism and employee turnover among employees whose dependents are enrolled; and (3) training of child care workers with skills in early developmental learning techniques.

This project will benefit the parents, siblings, and children participating in the project, the community at large through the production of trained child care workers, and the educational system of the community through the early preparation of children, both handicapped and nonhandicapped, for entry into the educational system.

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.



DAVID H. TURNER

president's page

Membership

Soon most of you will be receiving your yearly dues statement for your county, TMA and AMA dues. How many of you will join your county society, your TMA, and your AMA? How many of you will not join at any level of organized medicine?

Whether you are a member or not, the actions at each level of organized medicine touch your life as a medical practitioner.

Membership in all levels of organized medicine is an essential component of professional citizenship and, like political citizenship, should not be fragmented. Do you want a voice in government only at the city level, only at the county level, only at the state level, or only at the national level? I'm sure you would feel disenfranchised if you were deprived of a voice at any of these levels of government which affect your life.

Citizenship—both political and professional—is not, of course, without cost. Your dues, your support, your approval, and even your opposition—the cost of professional citizenship—are needed at all levels so that organized medicine will remain an effective force.

Unity—the cornerstone in our foundation, is the way to keep an effective force. Unity has been the primary concern of all organizations ever since man first discovered the strength of joining together. Without unity, the strength of the organization declines and we are again reduced to individuals bickering with one another.

We as physicians unite to conquer disease and treat our patients but tend to fall by the wayside when it comes to supporting our medical organizations.

In the face of a changing federal government administration whose attitude toward our profession is ambiguous, we need unity as never before. This means having an American Medical Association that is buttressed by unified membership. Only the AMA has the facility, the expertise, and the experience to fight our battles at the national level. The most pertinent example of the damaging results of disunity that we can see is the plight of British medicine. It is well recognized that if British physicians had stood united under strong leadership, the British National Health Service could not have been imposed upon the British people. In this sense, the deterioration of medical care in Britain may be laid at the feet of the British physicians.

Our membership in organized medicine is growing but we need each and every physician as a member. We must settle our internal differences and speak with one voice at all levels of organized medicine if we are to continue to deal effectively with government, third party payers and others who would control the practice of medicine.

The rules and regulations of federal and state government bureaucracy exert their effect on the private practitioner within a few weeks after he has opened his office. For the young physician, lack of comprehension is often followed by a period of frustration. Unfortunately, some take the attitude that the future is predestined and that willing compliance is mandatory for survival. If the freedom of the private practice of medicine is worth anything, it is worth fighting for.

Fortunately, there are many physicians who now feel that the future is not predestined. They are joining the fight at all levels of organized medicine.

When you receive your 1978 dues statement, I strongly urge you to join all levels of organized medicine. "Give *before* it hurts." To paraphrase a famous quotation, "We must all hang together or we will surely hang."

Sincerely,

David H. Turner, M.D.

PRESIDENT

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NOVEMBER, 1977

editorials

Thanksgiving

For eyes to see the red and gold
Of Autumn leaves, and all
The glories of the universe—we praise
And thank Thee, Lord.
For hands that work to heal the sick
And bring relief with gentle touch
For those in sorrow or in need,
We thank Thee, Lord.

For tongues that speak—O, let them speak
To comfort only, not to hurt—
Direct them, as we bow the knee
To thank Thee, Lord.

The little feet that walked around
Behind me as I worked and played,
Now grown, they walk the ways of healing, too.
For land in which one still is free
To choose his goals and follow on,
We thank Thee, Lord.

For love that crept almost unknown
Into a manger long ago—
The Singer and the Song, and Life and Light
Dead upon a Roman cross. And so
Because you came and died, but rose again
We thank Thee, Lord.

This one day we set aside
To praise and thank Thee, Lord.
Each day should be Thanksgiving day.
Forgive ingratitude, we pray.
Forgive as we repent, and send
Thy blessings on this people, Lord.

J.B.T.

Man Should Bite Dog Skokie, R.I.P.

A crowd of people, mostly children, were running pell-mell down the street, and as they got closer it became clear they were frightened—very badly frightened. A few barking dogs tagged along the outskirts, and one little yellow dog was barking along behind. Though it appeared at first he was being left, it finally turned out that, incongruously, he was the cause of all the commotion.

"Help! Police! Mad dog! Mad dog!" screamed the breathless children. "Call the police!"

And sure enough, there he came—ears laid flat, eyes rolled back in his head, red tongue lolling. From it froth trailed out to fleck his coat. Obviously mad. Anybody could tell that.

They were approaching a corner where a policeman stood, and he was drawing his gun to end the demonstration when a man stepped out and said, "You can't do that! You'll violate his civil rights!"

"Just who the hell do you think you are?" the policeman shouted, cocking his revolver.

"I'm a lawyer from the Civil Liberties Union (CLU to you), that's who, and I'm here to see you don't violate that animal's civil rights."

"But he's going to hurt somebody! They might even get hydrophobia!"

"Well, he hasn't hurt anybody yet, and you can't shoot him. I'll have you in court if you do!"

The crowd hadn't stopped to listen to the conversation, and by that time had gone on past. One by one the children—and dogs—cut out and ran into their homes, finally leaving only the yellow dog, the policeman, and the CLU lawyer, who stood glaring at one another. The dog obviously hadn't decided what to do next, and the policeman looked defeated.

"Now, who is responsible for this animal?" asked the lawyer. The silence was deafening.

"Since no one is responsible for him, and since in his condition he obviously isn't responsible himself, maybe we could run him in—sort of protective custody, you might say," ventured the policeman.

About that time the dog wagon from the health department, called by an anxious parent, drove up to take the dog to the pound, but the CLU lawyer went through his act again. The dog, having lost his audience, was chasing his tail.

Finally someone got a judge to issue an injunction to prevent the dog from demonstrating without a permit, and, at the lawyer's insistence, to prevent the dog's being harmed until the matter was settled. The dog catcher moved in to remove the animal from the street, but the dog had other ideas, and managed to bite the CLU lawyer, who began screaming, "Shoot the s-o-a-b!" But of course the policeman's hands were tied.

The dog died, and at autopsy it was found he had a swastika tattooed beneath his tail. The lawyer got rabies and died, too, and he didn't.

But he should have.

J.B.T.



Happy
Thanksgiving

in memoriam

Edgar L. Austin, age 51. Died September 7, 1977. Graduate of University of Tennessee School of Medicine. Member of Memphis and Shelby County Medical Society.

new members

The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY

Marvin J. Beard, M.D., Maryville

CHATTANOOGA & HAMILTON COUNTY MEDICAL SOCIETY

Richard W. Donaldson, M.D., Chattanooga

Jack J. Messina, M.D., Chattanooga

George Z. Seiders, Jr., M.D., Chattanooga

Norman L. Stahl, M.D., Chattanooga

MEMPHIS AND SHELBY COUNTY MEDICAL SOCIETY

James R. Allen, M.D., Memphis

James L. Boswell, M.D., Memphis

Sheldon B. Korones, M.D., Memphis

Louis S. Parvey, M.D., Memphis

Martin L. Pinstein, M.D., Memphis

Randall L. Scott, M.D., Memphis

Daniel K. Westmoreland, M.D., Memphis

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ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Richard J. Moore, M.D., Oak Ridge

John W. Welch, M.D., Oak Ridge

WEST TENNESSEE CONSOLIDATED COUNTY MEDICAL SOCIETY

Arthur M. Woods, M.D., Jackson

personal news

Albert L. Cooper, M.D., Shelbyville, who has retired from active practice after 41 years, was honored with the presentation of a resolution from the medical staff of Bedford County General Hospital, in appreciation of his many contributions to the field of general practice. The resolution notes that Dr. Cooper has been appointed to a lifetime honorary medical staff membership and has been elected a lifetime emeritus secretary of the medical staff of Bedford County General Hospital and Nursing Home.

Thomas G. Dorrity, M.D., Memphis, president of the Memphis and Shelby County Medical Society and chief of staff at Methodist Hospital, received the Civitan Club's Americanism Award, which is presented each year on the basis of patriotism, good citizenship, and practice of the American way of life.

Howard A. Farrar, M.D., Manchester, was honored at an open house celebrating his 40 years of medical practice in Coffee County.

Charles J. Harkrader, M.D., Bristol, was honored by Bristol Memorial Hospital upon his retirement after 28 years of private practice.

Alvin J. Ingram, M.D., Memphis, was presented a plaque of appreciation by the Tennessee Crippled Children's Service in recognition of 17 years of service as chairman of their medical advisory committee and over 30 years of service as a participating orthopedic surgeon for their organization.

John Leshner, M.D., Knoxville, has been elected chairman of the board of Park West Hospital.

Newly elected officers of the Nashville unit of the American Cancer Society are *I. Armistead Nelson, M.D.*, president; and *Steven Stroup, M.D.*, vice-president.

Robert S. Sanders, M.D., director of the Rutherford County Health Department, Murfreesboro, and chairman of the Accident Prevention Committee, Tennessee Chapter, American Academy of Pediatrics, was presented a Certificate Award by the Council on Child Health, American Academy of Pediatrics. This award honors his efforts and that of other Tennessee pediatricians in securing passage of House Bill 300, the Tennessee Child Passenger Protection Act, enacted by this 1977 Tennessee General Assembly.

John B. Thomison, M.D., Nashville, has been elected president of the American Cancer Society, Tennessee Division. *John L. Sawyers, M.D.*, Nashville, has been elected chairman of the society's executive committee.

programs and news of medical societies

Nashville Academy of Medicine

Cost Containment—The Academy played a leading role in a public hearing on "Cost Containment" held on Sept. 26 by the Statewide Health Coordinating Council. In the Academy's statement were general observations on the complex causes of the increasing national expenditure for medical care and the following positive recommendations: (1) that physicians consciously consider the cost-benefit ratio; (2) that Medicaid and Medicare reimbursement policies be reevaluated and restructured to reflect realistic costs for services; (3) that private health insurers consider coverage for more outpatient services (in order to decrease costly over-utilization of hospital inpatient services) with increased deductibles and/or co-payments; and (4) that health planning agencies, such as the Health Systems Agencies, actively seek and include physician participation in decisions that affect the quality and cost of health care.

Maury County Medical Society

The Maury County Medical Society met at the Graymere Country Club on Oct. 3, 1977, with 36 physicians in attendance. Dr. Samuel Marney lectured on "Trigger Mechanisms of Asthma and New Drug Therapy for Asthma." Dr. Tom Dake, vice-president of the society, presided over the business meeting.

national news

From the AMA's Office in Washington, D.C.

Health Legislation Stalled

Burdened heavily with administration energy proposals and tax reform measures the first session of the 95th Congress staggers toward adjournment with a number of important health bills still far from resolved.

Among these important health bills are the Hospital Cost Containment Plan; the Health, Education and Welfare Appropriation; a sweeping overhaul of Federal Drug Administration procedures; Medicare and Medicaid amendments; new federal controls over clinical laboratories; aid for rural health clinics; guidelines for genetic research; easing required U.S.

medical school admission of foreign medical graduates; postponing the proposed saccharin ban; amending the black lung and renal disease programs; expanded aid for maternal and child health care; continued higher pay for federal and military physicians; and excuse from income tax of federal medical scholarship income.

Anti-Fraud Legislation Seems Assured

However, the Medicare-Medicaid anti-fraud and abuse bill has won overwhelming House approval on the way to expected final passage this year. Stricken from the measure was a provision to guarantee medical records privacy.

The bill, cleared by a 362-5 vote, vaults Professional Standards Review Organizations (PSROs) into major monitoring bodies to detect fraud and abuse in federal health programs.

The legislation also directs HEW to develop ambulatory care review methodologies for PSRO use; directs HEW to require capable PSROs to undertake ambulatory care review within two years after designation as a PSRO; and makes "competent" PSRO reviews of services conclusive for purposes of federal payment, if the PSRO has entered into a memorandum of understanding.

Fraud and abuse information detected by a PSRO would be provided to federal and state investigative agencies. Patient records in the PSRO would not, however, be subject to subpoena or discovery proceedings in a civil action.

Other provisions of the bill provide

- increased Medicare penalties by upgrading fraudulent acts from misdemeanors to felonies;
- suspension from participation in Medicare and Medicaid for practitioners convicted of a criminal offense related to involvement in Medicare or Medicaid;
- annual disclosure by Medicare and Medicaid institutional providers of the identity of any person with a 5% or more ownership in the institution;
- authority for subpoenas for information and review of Social Security health programs.

The bill, worked out jointly by the House Ways and Means and House Commerce Committees, also requires HEW to establish uniform reporting systems for health services institutions.

Patient Records Confidentiality Urged

Hearings earlier on the Senate version of the House-passed Medicare-Medicaid anti-fraud and abuse bill drew testimony from the AMA as to the importance of providing strong safeguards against the abuse of the confidentiality of patient records. Testifying before the Senate Finance Subcommittee on Health, Robert B. Hunter, M.D., chairman of the AMA Board of Trustees, said "Inappropriate

distribution of individual medical records adversely affects the individual's constitutionally protected right of privacy."

Dr. Hunter supported a provision approved by the House Commerce Committee that prohibits PSROs from disclosing to the government PSRO records on individual patients not covered by federal programs without their written consent.

Dr. Hunter said the success of the patient-physician relationship depends to a great extent on the willingness of the patient to discuss freely with his physician all subjects relating to individual health no matter how personal or sensitive. "Should either party feel that this information, discussed privately, will become a matter of public record, the foundation of the patient-physician relationship would be irreparably harmed."

Health Resources Allocation Outlined

HEW has issued detailed guidelines for health planners that included a goal of fewer than four hospital beds per 1,000 population.

"The guidelines will help put brakes on construction of new hospital bed space and high-cost specialty services such as open-heart surgery and computerized x-ray scanning," said HEW Secretary Joseph Califano.

The proposals, which are not final, would immerse the federal government deeply into allocation of health resources in communities and regions across the nation.

Regional Health Systems Agencies, provided in the Health Planning Law and challenged in court by the AMA, not only are told to aim for a four per 1,000 bed ratio, but in later years "will be required to indicate how they will reach a bed population ratio of 3.7 per 1,000," according to HEW.

The current national average is 4.4 beds per 1,000 population. The reductions proposed by HEW would eliminate some 100,000 beds of the present one million beds over the next seven years. The number of beds at present "is significantly in excess of what is actually needed . . . and contributes to the high cost of hospital care with little or no recognizable health benefits," said HEW.

The guidelines propose that there should be an average annual occupancy rate of at least 80% for all nonfederal, short-term hospital beds except under extraordinary circumstances. Exceptions would include small rural hospitals and facilities in areas with large seasonal changes in population.

The 205 local health systems agencies were also advised on obstetrical services, pediatric inpatient services, neonatal intensive care units, open-heart surgery, cardiac catheterization units, radiation therapy, computed tomographic scanners, and end-stage renal disease.

A spokesman for the AHA commented that the proposals were too detailed and would provide less flexibility for local planning agencies if Congress

grants HEW the power to put them into effect.

However, three members of the Senate Human Resources Subcommittee on Health—Sens. Edward Kennedy (D-Mass.), Jacob Javits (R-N.Y.), and Richard Schweiker (R-Pa.)—wrote Secretary Califano that they were “pleased that HEW has ‘bitten the bullet’.” The time has come, they said, “to set numerical standards.”

If the recommendations were accomplished, HEW officials said, the nation would save more than \$2 billion annually. HEW pins its hopes for the guidelines on Congress approving a law giving the federal government more teeth over localities in enforcing and mandating standards. The planning law comes before Congress for extension and revision next year.

In addition to the number of beds and occupancy rate recommendations, here is what the proposed regs set forth:

- *Obstetrical services:* There should be at least 2,000 deliveries annually in an obstetrical unit located in an area with a population of 100,000 or more and at least 500 deliveries in any unit located in an area with a smaller population.

“In view of declining birth rates and the mounting underutilization of obstetrical beds, obstetrical standards for the minimum number of deliveries and occupancy rates are designed to discourage unnecessary duplication and inappropriate proliferation of services, and to maintain quality of care,” said HEW.

- *Pediatric inpatient services:* There should be a minimum of 20 beds in a pediatric unit, except in rural areas.

Pediatric units should maintain average annual occupancy rates related to the number of pediatric beds (exclusive of neonatal intensive care units) in the facility. For a facility with 20-39 pediatric beds, the average annual occupancy rate should be at least 65%; for a facility with 40-79 pediatric beds, the average annual occupancy rate should be at least 75%; for facilities with 80 or more pediatric beds, the average annual occupancy rate should be at least 80%.

- *Neonatal intensive care units:* The total number of neonatal intensive care beds should not exceed four per thousand live births per year in a defined neonatal service area. A single neonatal intensive care unit should contain a minimum of 20 beds.
- *Open-heart surgery:* There should be a minimum of 200 procedures performed annually in any institution in which open-heart surgery is performed. No new open-heart units should be opened unless each existing or previously approved unit in the health service area (or areas) to be served is operating and is expected to continue to operate at a minimum of 350 open-heart surgery cases per year.
- *Cardiac catheterization:* There should be a minimum of 300 procedures (intracardiac and/or coronary artery catheterization) performed

annually in any adult cardiac catheterization unit plus a minimum of 150 cardiac catheterizations performed annually in any pediatric cardiac catheterization unit. No new cardiac catheterization units should be opened in any facility not performing open-heart surgery. No new adult cardiac catheterization units should be opened unless the projected number of studies per year is greater than 500.

- *Radiation therapy:* A megavoltage radiation therapy unit should serve a population of at least 150,000 persons or at least 450 new cancer cases per year. No new megavoltage units should be opened unless each existing or approved megavoltage unit in the health service area(s) is performing and is expected to continue to perform at least 7,500 treatments per year.
- *Computerized tomographic scanners:* Computerized tomographic scanner (head and body) should operate at a minimum of 2,500 patient procedures per year. There should be no CT scanners approved unless each existing or approved CT scanner in the service area is performing at a rate greater than 4,000 patient procedures per year.
- *End-stage renal disease:* The health systems plans established by HSAs should be consistent with standards and procedures contained in the HEW regulations governing conditions for coverage of suppliers of end-stage renal disease services.

NHI Hearings Scheduled

At a request of President Carter, the HEW Department is developing recommendations for a national health insurance (NHI) proposal to be introduced into the Congress early next year.

In order to obtain a wide range of views on NHI, Secretary Califano has asked each of the HEW regional offices to solicit the views and recommendations of concerned citizens in their area.

The AMA via state medical societies has encouraged selected physicians to attend some 100 scheduled meetings across the country in order to present the viewpoints of the medical profession.

Corrected Medicare Payments List Issued

Eight months after publication of a botched list of physicians receiving substantial Medicare payments in 1975, the government has published a new list reworked from top to bottom. After a protest last spring from the AMA over the high error rate, HEW Secretary Califano apologized and promised release of a corrected list.

Last March, responding to requests from the news

media, HEW printed the names and amounts received of 409 physicians and 1,750 groups that did more than \$100,000 of Medicare business in 1975. The Freedom of Information Law compelled this disclosure, HEW said.

The AMA checked the original list and found, in a sizable sample, an error rate of more than 60%.

HEW officials have announced that next time they will list all physicians who received any Medicare payments at all in 1976. Estimated costs to the government of preparing this annual listing is from \$700,000 to \$1 million at the start and some \$300,000 annually afterward. No estimates have been made of how much added cost would fall on the carriers who have prime responsibility for gathering such data.

HEW Regulations Overhaul Begins

"Operation Common Sense" to make readable the 6,000 pages of HEW Department regulations has been launched by HEW Secretary Califano.

Along the way some provisions will be eliminated in the "top-to-bottom" overhaul that will take years, Califano said.

"Long complicated regulations, often taking years to issue, have too long been the hallmark of the federal government in general and this department in particular," Califano said. "The President has vigorously declared his desire to see shorter, clearer regulations issued in timely fashion. I am determined that this department lead the federal government in the direction charted by the President."

Forty-five pages of material were issued to the press to explain Operation Common Sense. In reply to a question about this from a reporter, Califano said with a smile that sometimes clarity isn't served by brevity.

The government has proposed regulations to strengthen the Medicaid child health screening program (EPSDT).

The regulations set forth by the Health Care Financing Administration (HCFA) clarify and update existing provisions dealing with penalties for states that fail to comply and the method used in carrying out the screening of children. One purpose is to give states greater flexibility in administering the plan.

HCFA said "States have a responsibility to provide scheduling assistance, transportation, and follow-up services to eligibles in order to remove significant obstacles that program experience clearly indicates eligibles generally have in obtaining EPSDT services."

The regulation adds immunization to the screening package rather than as an item to be determined for treatment later.

NHI Assistant Named by HEW

Named special assistant for national health insurance at the HEW Department is James Mongan, M.D., a top staff member of the Senate Finance Subcommittee on Health.

Dr. Mongan was selected by HEW for the new post where the physician will report to Secretary Califano and to Assistant Secretary for Health Julius Richmond, M.D. In announcing the selection, Califano said "I am confident that NHI will emerge as the premier domestic accomplishment of the Carter administration."

Dr. Mongan, formerly of San Francisco, was a public health service physician before joining the Finance Committee staff seven years ago.

In another HEW Department personnel move, M. Keith Weikel, Ph.D., acting director of the Medicaid Bureau, is resigning to take a post outside of government.

announcements

CALENDAR OF MEETINGS

NATIONAL

1977

- | | |
|--------------------|--|
| Nov. 28-
Dec. 1 | American Heart Association, Fontainebleau Hotel, Miami Beach |
| Nov. 29-
Dec. 4 | International College of Surgeons (U.S. Section), Fairmont and Roosevelt Hotels, New Orleans |
| Nov. 30-
Dec. 3 | American Medical Women's Association, Marriott Hotel, Denver |
| Dec. 3-8 | American Academy of Dermatology, Convention Center, Dallas |
| Dec. 4-7 | AMA House of Delegates Interim Meeting, Palmer House, Chicago |
| Dec. 5-7 | Southern Surgical Association, The Homestead, Hot Springs, Virginia |
| Dec. 7-11 | American Medical Tennis Association, The Smoke Tree Ranch, Palm Springs, California |
| Dec. 10-13 | AMA Winter Scientific Meeting, Fontainebleau Hotel, Miami Beach |
| Dec. 14-17 | West Coast Allergy Society, Camelback Inn, Scottsdale, Arizona |

1978

- | | |
|------------|---|
| Jan. 11-14 | National Symposium on Head and Neck Cancer, San Francisco Hilton Hotel, San Francisco |
| Jan. 11-14 | Nuclear Medicine—Ultrasound—Computerized Tomography, A Confrontation, Disneyland Hotel, Anaheim, California |

- Jan. 15-19 Pan American Cancer Cytology Congress, Caesar's Palace, Las Vegas
- Jan. 22-26 Mid-Winter Clinical Convention In Ophthalmology and Otolaryngology, Los Angeles
- Jan. 23-25 Society of Thoracic Surgeons, Sheraton Twin Towers, Orlando, Florida
- Jan. 23-27 Southern Clinical Neurological Society, El Conquistador Hotel, Las Croabas, Puerto Rico
- Jan. 25-28 Southern Society for Pediatric Research Braniff Place, New Orleans
- Jan. 28-Feb. 3 American Society of Contemporary Medicine and Surgery, Americana Hotel, Bal Harbour, Florida

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IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

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Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
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Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1977-78

Dec. 2-3	What's New in Obstetrics for Physicians? (10 hours)
Jan. 27	Annual L. W. Edwards Memorial Lecture (1 hour)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 22-24	Clinical Endocrinology (21 hours)
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
April 19-21	Legal Aspects of Radiology (co-sponsored by School of Law)
April 21	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 22	Annual Scott Surgical Society Lectureship
April 27	Annual Frank E. Luton Lecture in Psychiatry (1 hour)
April 28-29	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists)

- May, 1978 Postgraduate Course in Allergy
 May, 1978 Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)
 July 6-9 Contemporary Clinical Neurology, Hilton Head, S.C. (16 hours)

For information contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1977-78

- Dec. 10-11 Basic Clinical Genetics—Las Vegas
 Jan. 17 Prophylactic or Preventive Antibiotic Usage—McMinn-Monroe County Medical Society
 Mar. 2-3 Clinical Orthopedics—Chattanooga
 Mar. 20-23 Diagnostic Radiology for Emergency & Family Physicians—Lake Tahoe, NV
 Mar. 21 Respiratory Infections—McMinn-Monroe County Medical Society
 Apr. 14-15 Pediatric Course—Chattanooga
 Apr. 18 Postsurgical Infections—McMinn-Monroe County Medical Society
 May 4-6 Basic Cardiology—EKGs & Therapy for the Primary Care Physician—Chattanooga
 May 16 Helminthic & Parasitic Infections Requiring Intermediate Hosts—McMinn-Monroe County Medical Society
 June 14-20 OB/GYN Course—Humacao, Puerto Rico

For information contact: LeRoy J. Pickles, Director, Continuing Medical Education, Suite 400, 921 E. 3rd St., Chattanooga, TN 37403, Tel. (615) 756-3370.

EAST TENNESSEE CHILDREN'S HOSPITAL

- April 18-19 A Day and One Half of Practical Pediatrics
 May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields, Committee on Continuing Medical Education, East Tennessee Children's Hospital, 2018 Clinch Ave., Knoxville, TN 37916.

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For further information contact: Maxie C. Maulsby, Jr., M.D., Office of Continuing Medical Education, Dept. of RBT, University of Kentucky, Lexington, KY 40506.

Continuing Education Schedule 1977-78

- Jan. 11-13 Medical Ethics—Galt House, Louisville, Ky. (Co-sponsored by University of Louisville.) *Credit:* 17 hours AMA Category 1.
 Feb. 3-4 Burn Symposium—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 9 hours AMA Category 1. *Fee:* physicians, \$75; nurses and physical therapists, \$35.
 Feb. 19-24 Eighth Family Medicine Review: Session III—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 50 hours AMA Category 1 and AAFP, *Fee:* \$295.
 April 18-25 Controversies in Care (Obstetrics & Gynecology)—Location: Maui, Hawaii (leaving from Cincinnati, Ohio). *Credit:* 30 hours AMA Category 1. *Fee:* \$850.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

MEDICAL COLLEGE OF GEORGIA

- Dec. 6 Diabetes Mellitus
 Jan. 3 Cardiology
 Feb. 7 Pediatrics
 Mar. 7 Metabolic Diseases
 Apr. 4 Gastroenterology
 May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

XYTEX CORPORATION

Human Infertility Course

Dec. 9-10 Symposium in Human Infertility—Atlanta Marriott Hotel, Atlanta. *Fee:* \$125.

For information write: XYTEX Corporation, 1519A Laney Walker Blvd., Augusta, GA 30904.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Two eight-week postgraduate courses in sonic medicine at Bowman Gray School of Medicine will be offered on the following dates: Jan. 9-March 3 and April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. Two additional two-day real time courses are offered for obstetricians on March 9-10 and June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

OF SPECIAL INTEREST

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

Nov. 14-27 Electromyographic Testing for Neuromuscular and Other Diseases—with David Campion, M.D., UCLA Institute of Rehabilitative and Chronic Diseases, Los Angeles.

Criteria for Elective Plastic Surgery—with Edgar P. Berry, M.D., chief of plastic surgery, Lennox Hill Hospital, New York.

Arthritis in Childhood—with Bernhard H. Singsen, M.D., Department of Pediatric Rheumatology, Children's Hospital of Los Angeles.

Nov. 28-
Dec. 11 Angina Pectoris: Diagnosis and Management (a three-part telecourse on the differential diagnosis of angina pectoris)—with Michael V. Herman, M.D., chief of cardiology, Department of Medicine, Mount Sinai Hospital and School of Medicine, New York City.

Dec. 12-25 The Initial Management of Multiple Trauma—with Clement A. Hiebert,

M.D., Maine Medical Center, Portland, Oregon.

Accidental Hypothermia: A Consideration and a Priority—with Cameron C. Bangs, M.D., Willamette Falls Community Hospital, Oregon City; and University of Oregon Health Science Center, Portland, Oregon.

Recent Advances in the Management of Peptic Ulcer Disease—with Henry J. Binder, M.D., Yale University School of Medicine, New Haven, Connecticut.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

See September 1977 issue for complete 1977-1978 listing

Postgraduate Courses

See September 1977 issue for complete 1977-1978 listing

Dec. 5-8 Controversies in Gastroenterology—Philadelphia

Dec. 5-9 Advances in Diagnosis and Treatment in Clinical Medicine—Los Angeles

Dec. 5-9 Fluid and Electrolyte Balance, Hypertension and Renal Disease—Chicago

- Jan. 9-13 Contemporary Internal Medicine—New York
- Jan. 9-13 Workshops in the Pathophysiology, Diagnosis and Treatment of Electrolyte and Acid-Base Disorders—Philadelphia
- Jan. 18-20 Problems in Clinical Endocrinology—Seattle
- Jan. 24-27 Present Concepts in Internal Medicine—San Francisco
- Feb. 27-Mar. 3 4th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley—Sun Valley, Idaho
- Feb. 28-Mar. 2 Clinical Oncology for the General Internist—Denver

ST. FRANCIS HOSPITAL MIAMI BEACH, FLORIDA

Pediatric Dermatology Seminar & Cruise

- Feb. 23-26 Pediatric Dermatology Seminar—Konover Hotel, Miami Beach. *Credit:* 12 hours AMA Category 1 and AAD, AAFP prescribed. *Fee:* physicians, \$150; in training, \$100.
- Feb. 26-March 5 Post Convention Flight-Cruise to South America and the Caribbean. *Credit:* 12 hours AMA Category 1 and AAFP, AAD prescribed. *Fee:* \$795.

For information contact: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, N. Miami Beach, FL 33169.

GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

- Jan. 23-26 Clinical Cardiology Conference 1978—Southampton Princess Hotel, Golf, Beach and Tennis Club, Hamilton, Bermuda. *Credit:* 20 hours AMA Category 1 and up to 23 hours AAFP elective. *Fee:* \$250.

For information contact: Office of Continuing Education, Georgetown University School of Medicine, Kober-Cogan Room 412, 3800 Reservoir Road, N.W., Washington, DC 20007.

AMERICAN SOCIETY OF CONTEMPORARY MEDICINE AND SURGERY

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For information contact: John G. Bellows, M.D., Ph.D., Director, 6 N. Michigan Ave., Chicago, IL 60602, Tel. (312) 236-4673.

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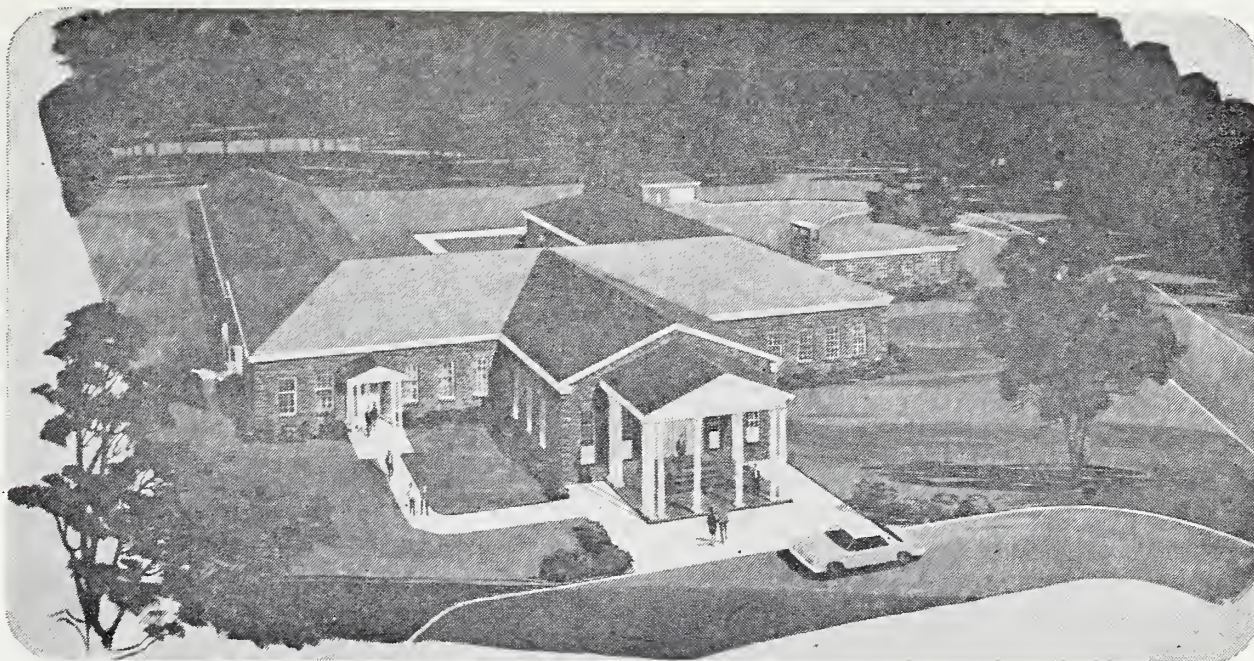
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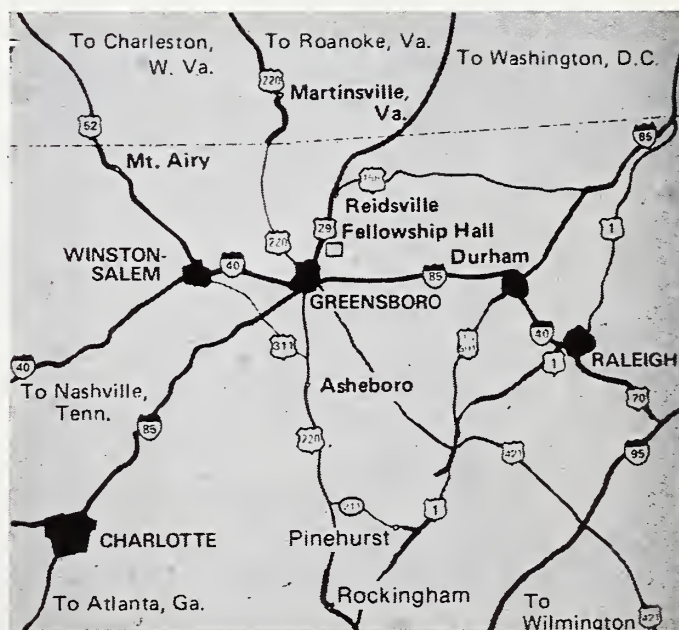
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Medicaid Doctors Work Harder And Earn Less, AMA Reports

Medicaid doctors may work harder and earn less money than physicians who treat relatively few Medicaid patients, an AMA study reveals.

An analysis of data from the AMA's Tenth Periodic Survey of Physicians, a random sample of 5,288 physicians practicing in the United States, determined that physicians with a higher proportion of Medicaid-eligible patients in their practices earned an average of \$51,283 in 1974, while physicians treating fewer Medicaid-eligible patients had an average net income of \$53,142. Also, physicians with high Medicaid-eligible practices reported an average of 139.6 patient visits per week, while doctors seeing few Medicaid-eligible patients averaged 128 visits per week.

A comparison of average fees charged for four basic procedures shows that doctors treating more Medicaid-eligible patients charge lower fees than do physicians with fewer Medicaid-eligible patients. The initial office visit charge of the Medicaid doctor, for instance, was \$19.67 in 1975, while the fee for a first office visit of other doctors was \$22.27. For the annual physical examination, Medicaid doctors charged an average of \$22.90, while others charged \$25.67.

Physicians whose practices include a relatively greater proportion of Medicaid-eligible patients tend to be younger, are slightly less experienced, are more likely to be graduates of foreign medical schools, and are less likely to be board certified, the survey found.

On the average, Medicaid-eligible patients as a whole represent 16.7% of the patients of American doctors. But most of them are seen by a minority of the doctors. More than half of all physicians report Medicaid-eligible patients are less than 10% of their practice, and three fourths of doctors report less than 20% of their patients are Medicaid-eligible. On the other hand, 5% of the doctors report having 50% or more Medicaid-eligible patients.

Accidental Poisoning of Actress Brings Change in Diet Supplement Regulations

A Hollywood actress' career was wrecked by lead poisoning, inadvertently caused by taking

contaminated dietary supplement for six years. The mysterious crippling illness caused by lead in the powdered animal bone supplement baffled more than 20 physicians who examined the actress over a period of years. She finally diagnosed the condition herself after months of study in medical libraries in Los Angeles.

No one knew the food supplement contained lead because at that time such products were considered as a grey area by the Food and Drug Administration, neither food nor drug, and there were no safety regulations. The actress' experience has caused the FDA to take another look at health foods and dietary food supplements and to demand proof of their safety.

Beginning in 1962 a doctor prescribed a dietary supplement prepared from powdered animal bone for the actress, then age 34, for painful menstruation. The supplement was prepared in a glue factory in England from the bones of old horses. She became ill in 1964 and got steadily worse. By 1967 she could walk only with a cane and no longer was able to work in film and television. In an effort to treat the illness the daily dosage of the bone supplement was increased. Many diagnoses were considered: tuberculosis, toxoplasmosis, leukemia, lupus erythematosus, rheumatoid arthritis, and, "time after time," psychoneurosis.

The patient wrote her own account of her experience. "In all, I consulted 22 California physicians, all of whom failed to find the cause of my illness. Then I said to myself: 'There's an answer to everything. I'm going to find out.' After studying the various and sundry analyses of my condition, I had a few friends drive me to the medical library at University of California at Los Angeles. I was too weak to walk by myself and had lost the use of my right arm. I had to be carried in.

"I returned to that library many, many times, studying all material on any of the suggested diagnoses of my many physicians, taking notes with my left hand. Finally, I came across a book called *Toxicology of Industrial Metals*. In it were described the toxic effects of metal poisoning on factory workers, and the descriptions of some of the illnesses fit my own like a glove."

She then went to technical bookstores and ordered every available book on metal poisoning, and spent months sitting in bed reading them and taking notes. She concluded that her problem was lead poisoning. Her diagnosis was confirmed by a toxicologist. Tests made of the bone meal found high lead contamination. The FDA was informed, but they did not have jurisdiction under the laws prevailing at that time. She also sought out others who had taken the bone meal supplement, and found they also had become ill.

After she ceased taking the bone meal, strength gradually returned, but she was left with residuals of lead in the body. Several years later a moderate anemia became severe and in 1976 tests indicated that leukemia was present.

Herbal Health Pills

Cause Lead Poisoning

Another case of accidental lead poisoning from health food products is reported. A California housewife was poisoned by herbal health pills imported from Hong Kong. The 59-year-old woman had consulted a herbalist-acupuncturist for pains in her joints. The practitioner instructed her to take two types of herbal pills, one orange and one red, three times daily. She took the pills regularly for several months, along with acupuncture treatments, but developed pains in shoulder, neck, back, knee, hip, breasts, and abdomen, as well as insomnia, irritability, and paranoia. Her pills were analyzed and found to contain a high amount of lead. The pills were stopped and therapy started to get the lead out of her system, and improvement was rapid.

Efforts are underway to find other possible patients at risk. The herbalist had obtained the pills from Hong Kong and was not aware of their lead content.

The FDA does not at present have the resources to do a proper job of surveillance of the health food industry. No official standards have been established of acceptable levels of lead in foods.

The FDA has been picking up and analyzing samples of powdered bone meal from health food

stores across the country in the wake of the case of the poisoned actress.

Satellite Telecast Planned From AMA Convention

The AMA will use a satellite to transmit selected programs from the Winter Scientific Meeting at Miami to physicians at 35 hospitals in 11 states on the other side of the country. The event will mark the first time anywhere in the world that a major medical meeting of multidisciplinary scope will harness the power of satellite technology to provide continuing medical education.

For physicians at the Miami meeting, there will be only a few signs that a satellite adventure is taking place. About all that will be visible will be a huge van parked near the meeting site, the Fontainebleau Hotel, and a room in the hotel that will be set up as a TV studio. Meanwhile, 24,000 miles above the equator near the west coast of South America, NASA's Communications Technology Satellite (CTS) will continue to orbit and transmit microwave signals as it has since it was launched in January, 1976, from the Kennedy Space Center in Florida. It is a two-way television and voice communication system, a joint U.S.-

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Canadian effort that has its control base at Ottawa.

The major impact of the program will be in 11 western states: New Mexico, Idaho, Wyoming, Montana, Colorado, California, Arizona, Nevada, Oregon, Utah, and Washington. There, physicians will gather on Dec. 12 at 31 Veterans Administration hospitals and four private hospitals to view the satellite CME transmissions—and receive the same CME credits as if they went to Miami.

And the project won't be just a case of AMA-goes-to-the-movies. Physicians watching the transmissions also will be able to directly question and hold discussions with the faculty in Miami during some segments of the broadcasts. The project is being made possible through the cooperation of the VA, which is a NASA-designated investigator for the CTS experimental satellite. For several years, the VA has operated the VETSAT Network among its hospitals and is still developing the experimental system.

One of the major benefits of using satellites for CME is that it can cut costs for the individual physician. The greatest cost to the MD is the time lost from his practice while he goes to and attends a CME program. The second greatest cost is maintaining himself at the meeting site, the hotels, the meals, etc. The lowest part is the program cost itself. AMA's initial CME-by-satellite program will be free of charge to the physicians at the CTS earth terminals in the 11 states. For any future programs, the physician will pay the very minimal cost of his own program.

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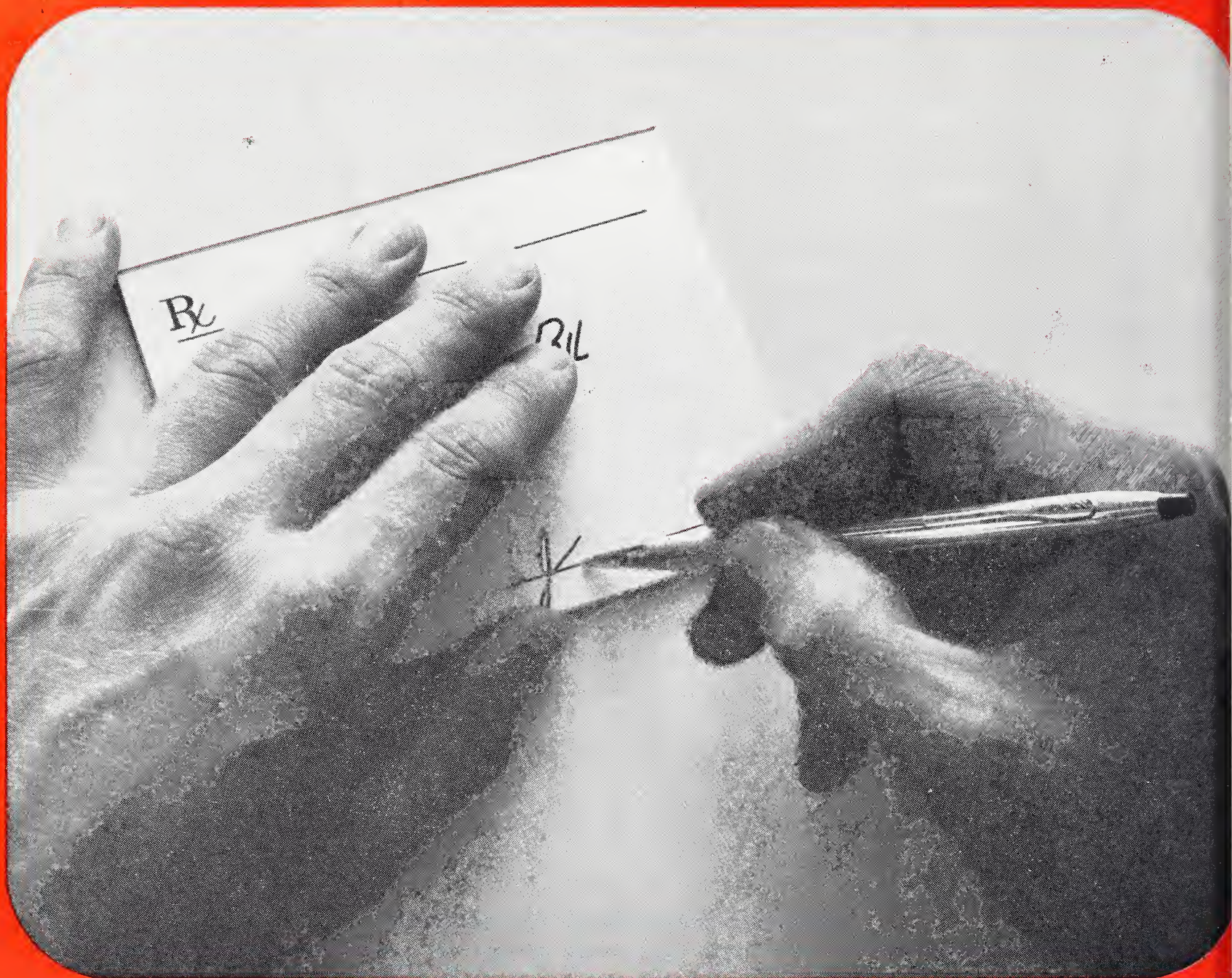
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Offbeat Pioneers

JAMES X. CORGAN, Ph.D.

Introduction

In North America prior to the Civil War the M.D. degree was the normal academic credential for well-prepared professionals in all scientific fields. Curricula leading to the Ph.D. and to other advanced degrees were virtually unknown or had yet to evolve, and the M.D. curriculum did not necessarily require laboratory, clinical, or hospital work. As a result of differences in curricula, the professional interests and professional activities of antebellum M.D.s were considerably different from the professional interests and professional activities of contemporary people who hold the same degree.

Today, studies in the history of medicine tend to de-emphasize the accomplishments of M.D.s who were part of the 19th century medical community but who followed interests that lay outside the mainstream of modern medicine. In Tennessee, as in other regions, many of these more divergent pioneer M.D.s made significant contributions to intellectual history. The present study calls attention to the accomplishments of three early leaders who were offbeat characters in the broad history of medicine in Tennessee.

Henri Erni, 1822-1885

From Folmsbee's study of East Tennessee University¹ and from Hamer's history of the Tennessee State Medical Association,² Henri Erni emerges as a little known leader in the antebellum scientific community. Erni began a discontinuous involvement with Tennessee science during June of 1850 when he accepted a faculty position at East Tennessee University, where his areas of instruction included chemistry, mineral-

ogy, geology, botany, French, and German.³ Though subjects other than languages were the traditional responsibility of science professors at East Tennessee, language instruction reflected Erni's special competence.

Erni left East Tennessee in 1852 for economic reasons and because he was dissatisfied with laboratory facilities in chemistry. He returned to the University in 1857 and a prolific record of publications during this second interval suggests that the chemical laboratory was much improved. In 1859 Erni moved from Knoxville to Nashville where he accepted a professorship in chemistry and medical jurisprudence at Shelby Medical College, a position he held until the Civil War forced the closing of the college. Erni apparently remained in Tennessee until late 1863 or early 1864 when he made his way to Baltimore and then to Washington where he found employment as the only agricultural chemist with the U.S. Department of Agriculture.

Tennessee-oriented historical sources offer very little data on Henri Erni. Where did he come from? What were his interests and background? A biography by Miles and Kuslan³ provides some of the details.

Henri Erni was born near Zurich, Switzerland, on Jan. 22, 1822. He went to what was called an "industrial school" and then to the University of Zurich where he excelled in chemistry. What earned degrees he held is not clear. During his early months in the United States he occasionally identified himself as a Ph.D., but this claim was not made in later years. Whatever degrees he held, Erni's accomplishments were impressive enough to warrant an appointment to the Yale University faculty. In 1849, he became an instructor in botany and a laboratory assistant in chemistry at Yale's newly established Sheffield

¹From the Department of Geology, Austin Peay State University, Clarksville, TN 37040.

OFFBEAT PIONEERS/Corgan

Scientific School. From Yale, Erni moved to Tennessee in 1850, to Massachusetts in 1852, and to Vermont in 1854. The University of Vermont awarded him honorary A.M. and M.D. degrees in 1856. He returned to Tennessee in 1857.

In the years after the Civil War, Erni had an extremely varied career. Among other things he was U.S. ambassador to Switzerland, he wrote a standard textbook of mineralogy, he established a practice as a consulting chemist, he worked as a librarian for the U.S. Patent Office, and he was an employee of the U.S. Geological Survey. During the antebellum period Erni's scholarly interests were much more narrowly focused; he was a research chemist whose chief interest was study of the urine. Miles and Kuslan³ cite 15 original reports that Erni prepared during his Tennessee years, most published in medical journals. During his second interval in Tennessee, Erni also regularly provided the *Nashville Medical Record* with synopses of chemical articles from European journals. He authored at least seven of these summaries.

During the late antebellum period, Henri Erni was a leading figure in the medical community of Tennessee. He was a rather prolific author of chemical articles and a minor, though notable, figure in the history of American science.

Alexander Jackson, 1802?-1879

For 30 years, beginning in 1829, Dr. Alexander Jackson was one of the more vigorous intellectual leaders of West Tennessee. Though he was a medical man with good credentials for the era, Jackson's main role in Tennessee history was as an articulate advocate of scientific agriculture. He laid the basis for a technical understanding of agriculture at the University of Pennsylvania, where he graduated in the class of 1823. Presumably his degree was an M.D. but during the present study no attempt was made at verification of the degree.

Jackson moved to Tennessee in 1829, establishing a medical practice at Paris, Henry County.⁴ He joined the Medical Society of Tennessee in 1832 and in 1833 attended the society's annual meeting where he presented an essay on "The Medical Topography of the Western District of Tennessee."² A few years later a continuing interest in the land led him to become founding president of the Henry County Agricul-

tural Society.⁵ This pioneer group was formed on May 11, 1839, with 50 original members⁶ and held a successful fair in the fall of 1839.⁷ Available records suggest that the Henry County Fair of 1839 was the first agricultural exposition in the northern half of West Tennessee.

In 1840, Dr. Jackson moved from Henry County to Madison County, settling at Jackson, Tenn. Here he once again established a medical practice and became deeply involved in agriculture. By 1847 he had essentially retired from medicine,⁴ focusing his full energies on agriculture, and on Feb. 27, 1854, Dr. Jackson and others organized the Madison County Agricultural and Mechanical Society. Jackson was elected first president.⁸ Under his management the society launched a successful program of county fairs and soon extended its activities beyond the county level. In 1855 the Madison County Society became the nucleus for a loosely defined federation of agricultural societies from several counties of western Tennessee, which with financial help from the state, soon planned a Western Division Fair. A regional exhibition was held in Jackson, Tenn., from Oct. 22 through Oct. 26, 1855, soliciting participation from residents of all the western counties. Alexander Jackson was not only president of the fair, he was also a principal orator. The lengthy text of his speech, which dealt with the natural resources of West Tennessee, was later published as part of the proceedings of the fair.⁹

Until the Civil War disrupted agricultural activities, Dr. Jackson continued to be a leader in both local and regional organizations. During the mid-1850s he was also active at the national level, serving as a delegate from Tennessee to the U.S. Agricultural Society in Washington, D.C.⁴ After the Civil War, Tennessee farmers faced such grave economic problems that agricultural fairs and the betterment of agriculture received less emphasis, and apparently Dr. Jackson never again played a leadership role in agriculture. Still, his accomplishments during the antebellum era make Alexander Jackson one of the more notable figures in the intellectual history of West Tennessee.

Gerard Troost, 1776-1850

A wealth of biographical data are available for Tennessee's most distinguished scientist of the antebellum era.¹⁰ Gerard Troost was Dutch by birth but a Nashville resident from late 1827 until his death in a cholera epidemic of 1850. Troost

had earned degrees in both medicine and pharmacy, and during his early years he worked as a military surgeon with the Dutch Army. In Tennessee his most publicized accomplishments were as a science professor at the University of Nashville from 1829 to 1850, and as the first state geologist of Tennessee from 1832 to 1849.

Troost made many other contributions to the intellectual life of antebellum Tennessee that have not been mentioned in biographies. For example, when he first moved to Tennessee in 1827, he established the Nashville Museum of Natural History. Troost had one of the largest and apparently one of the best natural history collections in North America. By 1827 the collection probably included well over 20,000 specimens, and in his museum he supplemented specimen-based displays with exhibitions of the basic principles of chemistry and natural philosophy. The earliest known advertisement for the Nashville Museum of Natural History appeared in the *Nashville Banner and Nashville Whig* for Wednesday, Dec. 6, 1827, and the last known appeared in the same newspaper on Nov. 3, 1829. Troost ran his ads at irregular intervals and newspapers of the late 1820s and early 1830s are quite imperfectly preserved. Thus it has proved impossible to establish exact dates for the Nashville Natural History Museum. The nature of Troost's collection is better known.

Prior to establishing the museum Troost had a long and distinguished career as a naturalist.¹¹ He had written many articles on geological specimens that were apparently in his collection, and he had also traveled widely as a mineral collector for Louis Napoleon, king of the Netherlands. He had bird pelts from the East Indies, live reptiles, minerals from all over the world, Indian artifacts, and a fair amount of chemical and physical apparatus. His museum must have been a unique intellectual resource, unmatched on the American frontier of the 1820s.

In addition to his museum, Troost brought another great intellectual resource to the Tennessee frontier. His library was one of the more notable personal collections in North America. As soon as he arrived in the United States Troost became well known in intellectual circles and joined the leading scientific societies of the day. Previously he had met many of the leading scientists of Europe and joined many European learned societies. Like most of his peers Troost was familiar with classical languages. He was also

fluent in Dutch, French, German, and English. Thus, Troost's academic interests, his society affiliations, and his linguistic skills generated an unusually cosmopolitan library.

Was Troost's library entirely scientific? Were learned journals a large part of the collection? Some questions may never be answered, but in 1850 Troost's library was one of the two personal collections from the Kentucky-Tennessee area discussed in a national inventory of libraries.¹² His holding had reached the 7,000- to 8,000-volume category, a truly colossal accumulation for a person living on "The Frontier." Troost's private stock of books was larger than the library at any of the following Tennessee institutions: Jackson College, Columbia Female Institution, East Tennessee University, West Tennessee College, Cumberland University, Maryville College, Union University, Franklin College, and Washington College. Only the library of the University of Nashville and the Tennessee State Library were larger than Troost's private collection. In Kentucky, only the state library and Transylvania University had libraries that exceeded Troost's.

Quite apart from providing tangible intellectual resources, such as a library and a museum, Troost played an unsung role in Tennessee history as an organizer of statewide and local intellectual activities. He was one of the founding officers of the Society for the Promotion of the Cause of Popular Education which was established in Nashville on July 31, 1830,¹³ more generally known as the Nashville Lyceum, which sponsored public lectures for about two years. A complete list of speakers and topics is not preserved, but Troost spoke at least twice during the first year and he gave the last Lyceum lecture in June of 1832. All of Troost's known Lyceum lectures can be characterized as "popular science."

In 1830, the same year in which the Lyceum began, Troost joined the Medical Society of the State of Tennessee.² There is no evidence that he participated in establishing the society or that he was an especially active member, but he was scheduled for at least one address on medical topography.

Perhaps Troost's most significant unpublicized contributions to antebellum culture in Tennessee came in the late 1830s and early 1840s when he (1) served on the State Board of Agriculture of the Tennessee Agricultural Society¹⁴; (2) spent six years as co-editor of *The Agriculturist*, a major

OFFBEAT PIONEERS/Corgan

agriculture journal¹⁵; and (3) resumed a schedule of Lyceum-like lectures for the Nashville Mechanics Institute.¹⁶ At the same time, he was very active in historical research, preparing at least one lengthy translation of a Dutch explorer's observations on the American frontier.¹⁷ Perhaps it was because of this involvement with colonial history that Troost was made the first honorary member of Tennessee Historical Society.¹⁸

Published accounts of Troost's life tend to stress contributions made as a university professor and as a scholar who published dozens of scientific reports.¹⁰ The present study suggests that Troost played a very broad role in antebellum cultural affairs. He was even the author of articles on gourmet foods.¹⁹ All aspects of his career were "normal" activities for a very energetic medical man of the early 19th century. While he was clearly outside the mainstream of medical activities, Troost was a dynamic part of the medically educated intelligencia of antebellum Tennessee.

Summary and Conclusions

In modern academic nomenclature, Henri Erni would be classified as a chemist with rather marginal qualifications. Alexander Jackson and Gerard Troost would both be viewed as eccentric physicians who dabbled in things not of their professional concern. In the 19th century, Erni, Jackson, and Troost were apparently perceived quite differently. The M.D. degree was virtually the only academic pathway to a career in any of the sciences, and thus it was normal for leaders in science to be M.D.s.

In Tennessee, and elsewhere, the M.D.s of the last century made immense contributions to the

growth of knowledge in many nonmedical and paramedical fields. This brief article calls attention to three scientific leaders whose accomplishments have not been adequately identified in the past. There may be dozens of others whose work remains little known.

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DRUG COMA

Coma from sedative drug intoxication may persist for many days. Total apnea for five days and an isoelectric EEG for intervals up to 36 hours have been recorded with drug overdose patients who have survived without apparent neurologic sequelae. In overdose patients a flat EEG is not a reliable indication of brain death. Carefully attentive and continuous nursing care are the most important ingredients of successful management.

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Radial Pulse Deficits in Brachial Arteriograms

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The literature indicates that in a significant number of cases no notes were made about the presence or absence of the radial pulse following brachial arteriography.¹⁻³ Results are available on smaller series.³⁻⁶ This report presents the effect of percutaneous retrograde brachial arteriography on the radial pulse in 2,004 consecutive procedures performed from June 20, 1967, to May 3, 1972.

The principal complication of puncture of the brachial artery with retrograde injection is loss of radial pulse.⁷ Reports have varied from specific statements of five instances of lost radial pulse (2.5%) in 200 consecutive patients⁵ to generalized comments that such loss has been troublesome.⁴

Ashby et al⁴ reported a case in which a grand mal seizure developed after the brachial needle had been placed. Severe vasospastic digital ischemia resulted in the loss of two fingertips.

Materials and Methods

The patients were placed supine on the x-ray table with the arm to be injected abducted and hyperextended at the elbow in a supinated position on an arm board. Merthiolate was applied to the antecubital fossa, and a small quantity of 1% procaine without epinephrine was injected in the skin and around the brachial artery. An intravenous route for fluids was maintained through which Valium was injected, when indicated, to prevent further discomfort. A No. 18 gauge Seldinger needle was inserted into the brachial artery through a small incision made in the skin. When a flow of blood was obtained, a flexible wire guide was introduced through the needle; the needle was removed, leaving the wire guide in place. A soft angiographic catheter was then threaded over the guide wire into the brachial artery after which the wire guide was removed. A tube filled with heparinized (after July 1970) normal saline

(1 cc 1:1000 heparin in 500 cc saline) was attached to the catheter, with which it was periodically flushed. The flushing syringe was removed and the tubing was connected to an automatic pressure injector, particular care being taken to assure no air bubbles were present in the tubing or in the 60 cc of hypaque meglumine 60% used for angiography. The injection was made at 25 cc per second. The pressure injector was then removed and the flushing syringe was reattached and used as before. After it was apparent that the study was adequate, the catheter was removed and compression was applied to the site of the arterial puncture for at least five minutes. Status of the radial artery pulse was evaluated and recorded prior to leaving the arteriogram room. From June 1967 to June 1968, a PE 160 Seldinger needle, a 100 cm Seldinger wire guide and a 50 cm polyethylene catheter were routinely inserted. After 1968, all procedures were performed with a shorter guide and a catheter. Following arteriography, an ice bag was applied to the arm for six hours. The adequacy of the radial pulse was determined at regular intervals and evidence of ischemia of the hand sought.

Results

These 2,004 brachial arteriograms were carried out in 1,075 (53.6%) men and 929 (46.4%) women. Pulse deficits occurred in 37 patients (1.8%): 28 women (75.6%) and 9 men (24.4%). Of the women, the youngest was 24 years and the oldest 78 years of age. The youngest man was 31 and the oldest 77 years (Table 1). None of these patients had a disease process which might predispose to arterial thrombosis.

TABLE 1
INSTANCES OF PULSE DEFICIT

	Age						Total
	20-29	30-39	40-49	50-59	60-69	70-79	
Male	0	2	0	3	2	2	9
Female	3	2	6	10	2	5	28

From the Department of Neurosurgery, University of Tennessee, Cerebrovascular Research Center, and Semmes-Murphey Clinic, Memphis.

Reprint requests to Dr. Wood, Semmes-Murphey Clinic, 920 Madison, Suite 201-N, Memphis, TN 38103.

Technical difficulties at the time of arteriography occurred in only four of the 37 cases (10.8%). Three of these were related to insertion of the catheter and one to the pressure injections. In one, the radial pulse was diminished but the hand remained normal. In three, the radial pulse was lost at the time of the technical difficulty, but although the hands became cooler, they soon returned to normal without treatment.

Either the pulse was present, absent or diminished at the end of the procedure or it became absent at some point after the arteriogram. In order to evaluate this time relationship, we separated the patients into three groups: (1) pulse initially absent and either remained absent or subsequently returned; (2) pulse initially diminished, either remaining diminished or returning to normal; and (3) pulse initially normal, later becoming absent, subsequently either to return to normal or remain absent. In group 1 there were 18 women and four men. Seven of the group developed ischemic symptoms, six of whom returned to normal when the pulse spontaneously returned. The ischemic symptoms lasted from 20 minutes to 14 hours. One of this ischemic group required multiple brachioradial arterial surgical procedures and eventually had tissue loss in the hand. Twenty-one patients (including six in the ischemic group) were simply observed, with 6 pulses remaining absent and 15 returning spontaneously in times varying from five minutes to 24 hours after pulse loss.

In group 2 there were three men and five women. Two developed ischemic symptoms. One patient's symptoms spontaneously ceased in spite of persistent diminished pulse; in one woman, brachial artery thrombectomy resulted in the restoration of a normal pulse 27 hours after it became diminished. In two, the pulse remained diminished, but the hand was normal. The pulse returned to normal spontaneously in four cases in times varying from 3½ to 5 hours.

In group 3, there were five women and two men. Four of these lost their radial pulses in times varying from one to three hours after the completion of arteriogram, the pulses returning to normal in times varying from 1 to 15 hours after the pulse was lost. None of these had residual symptoms. Three members of group 3 underwent brachial vascular surgery. Two lost the pulse one hour after and one 3 hours after the arterio-

TABLE 2
BREAKDOWN OF THE THREE GROUPS

	Group			
	1	2	3	Total
Number of cases	22	8	7	37
Ischemic symptoms	7	2	5	14
Spontaneous return of pulse	15	4	4	23
Surgery	1	1	3	5
Tissue loss	1	0	0	1

gram. Two had successful restoration of pulse by thrombectomy, one 2¾ hours, and one 3 hours after the pulse deficit occurred; the third surgical case had a persistent absent pulse after surgery with minor persistent ischemic symptoms (Table 2).

Surgical Cases

A total of 5 cases in the 2,004 came to surgery (0.25%). Three were women and two were men. All developed ischemic extremity symptoms with the pulse deficit. In three, the pulse was present at the completion of the arteriogram, but disappeared from 30 minutes to three hours after the study. With brachial thrombectomy, two of these three had return of pulse and a normal hand; one had persistent absent pulse. One patient had a faint pulse after the arteriogram, becoming absent seven hours after completion of the study. Brachial thrombectomy reestablished the pulse and corrected the ischemic hand symptoms. The fifth surgical case (group 1) lost her radial pulse at the end of the arteriogram. She underwent multiple brachioradial surgical procedures, but her pulse was not successfully reestablished and she had tissue loss in the hand and continuing pain in the arm and hand.

Of the surgical group, failure to reestablish the radial pulse occurred in two cases (40%). The only tissue loss in the entire series occurred in this group (0.05% of the entire series or 20% of the surgical cases).

Discussion

Radial pulse deficits following brachial arteriography result from brachial thrombus formation at the site of the needle puncture and from arterial vasospasm. Whether the spasm is due to

Continued on page 887

Advantages of Anterior Cervical Discectomy

WARREN F. McPHERSON, M.D.

Introduction

There are three surgical approaches to the treatment of cervical disc disease: the standard laminectomy, the anterior fusion, and the anterior cervical discectomy. The standard laminectomy is done by a posterior approach and involves opening part of the lamina to expose the nerve root from its posterior side. The ruptured fragment of disc is then removed from under or above the nerve root.¹⁻³ The anterior fusion is an operative approach from the front of the neck. The disc and surrounding bone are removed, and a piece of bone from the hip is put into the neck. This approach has the advantage of achieving a fusion, which is sometimes helpful, and of working on the side of the nerve root and spinal cord where the pathologic process is occurring.⁴⁻⁷ The anterior cervical discectomy is done by an anterior approach, but only the disc is removed.⁸⁻¹⁷ No attempt is made to do a bony fusion. It is interesting to note that most patients undergo spontaneous fusion following this procedure.¹³ The operation is now done by many surgeons with a microscope.¹⁵⁻¹⁶ The anterior cervical discectomy has the added advantage of avoiding the incision in the hip and the problems associated with inserting a bone plug.

All the above procedures have been documented in the literature to be effective and safe, and the surgeon is left with the dilemma of choosing among these operative procedures. This paper compares the anterior cervical discectomy and the cervical laminectomy as to length of hospital stay and the amount of pain medication required to keep the patient comfortable.

Study

This study compares the results of 21 cervical laminectomies and 42 anterior cervical discectomies done by the same surgeon. The patients were comparable as to age, sex, and level of their lesions. They were picked for surgery using standard criteria, listed below.

- Long tract signs—signs of spinal cord com-

pression, such as hyperreflexia, difficulty in urination, weakness or numbness in the legs.

- Loss of sensation—sufficient to interfere with proper hand function.
- Loss of muscle power—progressive or such that arm or hand function is affected.
- Intractable pain, despite good conservative measures, including a trial of cervical traction.

One or more of these criteria were present in all the patients in this study. All had the diagnosis confirmed by a preoperative cervical myelogram. Patients in both groups had a lesion at only one level. Although lesions at more than one level can be treated by either approach, for purposes of this study, only those patients were chosen who had only one level done. Postoperatively, patients were given enough pain medication to keep them comfortable.

Results

All patients who underwent either type of procedure had a good or excellent result. They were completely relieved of all neurologic signs and symptoms or showed marked improvement. There were no deaths or significant complications in this series.

Hospital Stay

Of the 21 cases done by cervical laminectomy, the patients' average stay in the hospital postoperatively was 8.4 days, with a range of 5 to 20 days.

Of those patients who had an anterior cervical discectomy, the entire series showed an average hospital stay of 3.3 days, with a range of from one to ten days. As we became more familiar with this procedure, the last 21 cases stayed in the hospital an average of 2.7 days with a range of one to seven days.

Postoperative Pain

Of the 21 patients who had a cervical laminectomy the average patient required much larger doses of pain medication than those with anterior cervical discectomy, and the last 21 cases required almost none (Table 1).

Reprint requests to Dr. McPherson, Nashville Neurosurgical Group, 2501 Hillsboro Rd., Nashville, TN 37212.

Discussion

Undoubtedly the key to the good results that are seen with all types of cervical disc surgery is patient selection. As long as the criteria mentioned above are followed, all the operative procedures will give good results. However, the next major problem is selection of the operative procedure that seems to be best. All three approaches have had their proponents and have given excellent results. It seemed pertinent to compare them to see whether one procedure might offer advantages over the other two. As the cervical laminectomy approach is time honored,¹⁻³ effective and safe, the burden of proof seems to be on the surgeon who wishes to abandon it.

The anterior cervical fusion is the procedure of choice where there is instability of the neck.⁴⁻⁸ This operative procedure has given excellent results in my experience as far as radicular pain is concerned, but patients complain of hip pain for a month after surgical procedure.

The anterior cervical discectomy has now been well described in the literature,⁸⁻¹⁷ and several surgeons are getting excellent results using this approach. The advantages of one incision and the avoidance of a painful hip incision prompted me to start using it. The procedure is comparable to that described in the literature, with the exception of Harkinson and Wilson's right sided approach.¹⁶ I have come in from the side opposite the lesion because it seems easier using the microscope to work across the interspace.

Several people have commented on the postoperative stay and on patient discomfort. Hirsch's patients sometimes leave the hospital in four days,¹⁰ while those of Harkinson and Wilson with an anterior discectomy stayed an average of eight days, but it should be noted that some of these patients had multiple levels done.¹⁶ Cloward's patients with fusion went home in three to four days.⁵ No one has documented the exact postoperative stay.

TABLE 1
POSTOPERATIVE PAIN MEDICATION

	21 Laminectomies	42 Anterior Cervical Discectomies	Last 21 Anterior Cervical Discectomies
Morphine Sulfate	238 mg	1.6 mg	
Demerol		39.5 mg	
Dilaudid	1.3 mg	0.2 mg	
Codeine	102 mg	222 mg	240 mg

Martins stated people with anterior cervical discectomies did about as well in terms of patient discomfort as those with the Cloward procedure.¹⁷ Both Susen and Robertson stated that there was less morbidity with the anterior cervical discectomy than with the fusion,^{11,15} but none of them specifically documented the amount of pain medication.

Summary

The anterior cervical discectomy appears to offer the advantage of a shorter postoperative hospital stay and less pain medication than that required for a cervical laminectomy. In this study the average patient with a cervical laminectomy stayed in the hospital 8.4 days, while the average of the last group of anterior cervical discectomies only stayed in the hospital 2.7 days. The average cervical laminectomy required 238 mg of morphine postoperatively, while the last 21 of the anterior cervical discectomies required an average of only 240 gm of codeine.

These advantages should be considered by the neurological surgeon in selecting the operative procedure for cervical disc disease.

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Immunization Against the Highway Epidemic

ROBERT S. SANDERS, M.D.

This is an appeal to Tennessee physicians to publicly support the Tennessee Child Passenger Protection Act of 1977, which, as House Bill 300, was signed into law April 27, 1977, and becomes effective Jan. 1, 1978. This unique legislation, the first of its kind in the United States, will require a parent or legal guardian to "package" or restrain their children under age 4 in federally approved child restraint systems while riding in the family-owned vehicle on Tennessee streets and highways. Inasmuch as these restraints have been shown to reduce chances of death by over 90% and chances of injury by almost 80%, HB 300 will drastically reduce the 22 deaths and 1,000 injuries incurred yearly by Tennessee children in this age group.

Many Tennessee physicians, especially pediatricians, were very active in convincing their legislators this bill had merit. Seven state medical groups, including the TMA and the Tennessee Pediatric Society, endorsed this law as did two national organizations, the Accident Prevention Committee of the American Academy of Pediatrics and Physicians for Automotive Safety.

To obtain optimum results from this new law, all physicians, especially those who attend children, must be strongly supportive in their own practices, in the news media, and in public education efforts. It is especially important to be aware of and to warn parents against the "babes in arms" amendment unfortunately added to the bill during debate on the floor of the House of Representatives (by Representative Roscoe Pickering, Adams). This amendment, which exempts children "when held in the arms of an older person riding as a passenger," is inconsistent with

the intent of our bill, but our sponsors insisted HB 300 would not have passed without it. Nevertheless, we do have landmark legislation on the books and, hopefully, we can repeal the Pickering amendment in one to two years after statistics attest to the danger of "babes in arms."

In Knoxville an extensive public educational program was implemented in September and October. Sponsored by East Tennessee Children's Hospital, funded by the Automotive Division of Allied Chemical, and spearheaded by Martha Bushore, M.D., a pediatrician and director of emergency room services at the East Tennessee Children's Hospital, the "Seat Belt Campaign" has involved area physicians, nurses, teachers, school children, and the news media. Mayor Tyree proclaimed Sept. 18-24 "Seat Belt Safety Week," and some 400 posters, 87,000 information sheets, 6,000 bumper stickers, and 23,000 buttons were distributed, all promoting seat belt safety. This meritorious Knoxville effort has been beamed toward protecting children of all ages, and deserves praise and gratitude from all Tennessee citizens, especially physicians.

The "Child Passenger Safety Program," a state-wide public information and evaluation program, is being developed by the Transportation Center of the University of Tennessee to promote the child restraint bill. An advisor to this program, Dr. B. J. Campbell, Director of the Highway Safety Research Center, University of North Carolina, recently stated that this new Tennessee law is the most significant safety legislation ever passed in this country. But support by the medical profession is critical for the success of this program and possible similar programs in other states. It is hoped all physicians will thus assert themselves responsibly in this effort to immunize our young children against our "highway epidemic." 

Chairman, Accident Prevention Committee, Tennessee Chapter, American Academy of Pediatrics and Director, Rutherford County Health Department.

Preoperative Embolization of Hypernephromas

A. JAMES GERLOCK, JR., M.D.

The passage of embolization particles through arterial catheters has been used in a variety of clinical situations, including the management of central nervous system arteriovenous malformations and tumors, gastrointestinal bleeding, traumatic renal and pelvic bleeding, and epistaxis.¹⁻⁴ The case below will demonstrate the use of this technique in the preoperative management of a hypernephroma. In this patient, embolization of the renal artery was performed to decrease tumor bulk and operative bleeding.

This 56-year-old woman presented with a renal mass lesion which by arteriography was found to be a hypernephroma (Fig. 1). As can be seen from the arteriogram, the tumor involved almost the entire right kidney and was extremely hypervascular. Preoperative occlusion of the small segmental arteries of the kidney was done by Gelfoam embolization to occlude the distal small blood vessels in the tumor to prevent bleeding from collateral blood vessels. Once the blood supply from the small peripheral branches of the tumor is occluded by the Gelfoam, as seen in Figure 2, the main renal artery can be occluded by the use of a Gianturco stainless steel coil occluding device (Cook, Inc., Bloomington, Ind.) (Fig. 3).⁵ This was done in this patient prior to operation, and resulted in decreased blood loss at the time of surgery.

Discussion

Presently, the indications for embolic occlusions of the renal artery in hypernephromas consist of (1) preoperative dearterialization, (2) reduction of tumor bulk, and (3) control of hematuria in inoperative patients. Embolization is usually performed at the conclusion of the diagnostic angiographic evaluation of a suspected renal tumor.

Surgical-type gelatin sponge (Gelfoam) has

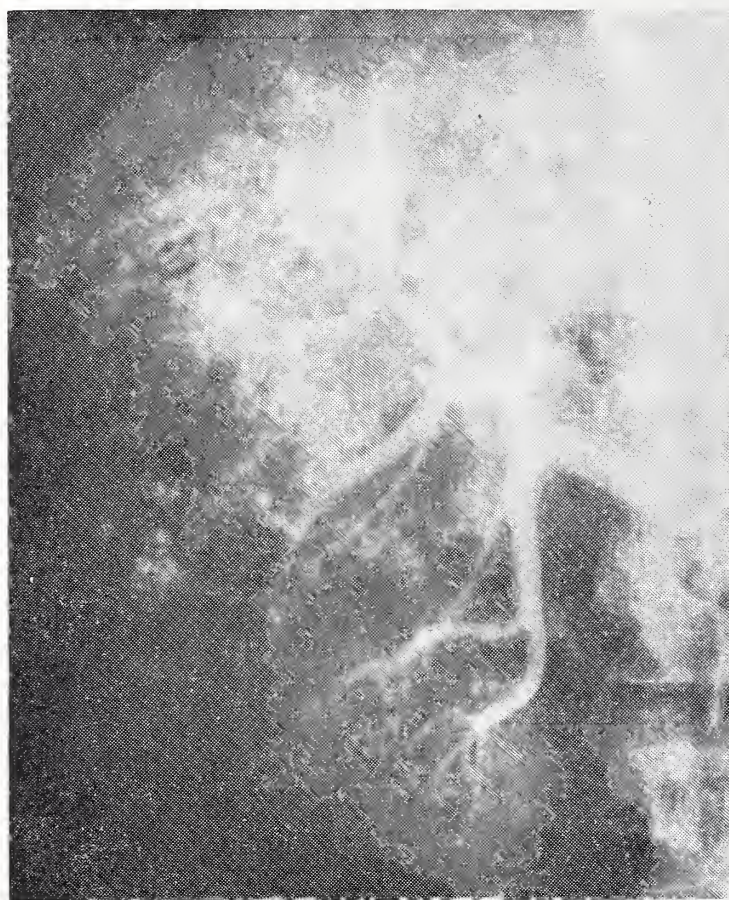


Figure 1. Right selective renal arteriogram shows a large hypernephroma of the kidney.

been utilized as the embolic material in all cases but one. In that one, embolization was performed with autologous subcutaneous tissue. The Gelfoam is cut into multiple tiny pieces measuring up to 5 mm, or into rectangular strips about 5 mm in width. Approximately 1 cc of packed dry Gelfoam particles or a Gelfoam strip is placed into a 10 cc syringe. Subsequently, about 8 cc of normal saline is drawn into the syringe, and the combination is vigorously shaken, which allows thorough wetting of the Gelfoam to facilitate injection.

From the Department of Radiology, Vanderbilt University Hospital, Nashville, TN 37232.



Figure 2. Right selective renal arteriogram following Gelfoam embolization. Multiple occlusions of the segmental renal vessels can be seen (arrows).



Figure 3. Right selective renal arteriogram following stainless steel coil placement into the main renal artery (arrow). Note almost total dearterialization of the large hypernephroma as a result of the embolization procedure.

Embolization is performed in stages with careful fluoroscopic monitoring and interval angiographic runs if necessary. Approximately 1 to 2 cc increments of the Gelfoam-saline mixture are injected. Test injections of contrast material follow each increment to continually assess the remaining vascularity of the tumor. Depending upon the vascularity of the tumor and size of the particles injected, large hypernephromas may require up to two or three Gelfoam sponges (2 x 6 cm) for total occlusion.⁶

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Much has been given us, and much will rightfully be expected from us. We have duties to others and duties to ourselves; and we can shirk neither.

We have become a great nation, forced by the fact of its greatness into relations with the other nations of the earth, and we must behave as beseems a people with such responsibilities. Toward all other nations, large and small, our attitude must be one of cordial and sincere friendship. We must show not only in our words, but in our deeds, that we are earnestly desirous of securing their good will by acting toward them in a spirit of just and generous recognition of all their rights.

But justice and generosity in a nation, as in an individual, count most when shown not by the weak but by the strong. While ever careful to refrain from wronging others, we must be no less insistent that we are not wronged ourselves. We wish peace, but we wish the peace of justice, the peace of righteousness. We wish it because we think it is right and not because we are afraid. No weak nation that acts manfully and justly should ever have cause to fear us, and no strong power should ever be able to single us out as a subject for insolent aggression.

Theodore Roosevelt
INAUGURAL ADDRESS
MARCH 4, 1905

Contraindications to Digitalis in Congestive "Heart" Failure

CHARLES E. KOSSMANN, M.D., EDITOR

JOHN D. BURK, M.D.:

A 49-year-old black stone-cutter came to the emergency room with the chief complaint of dyspnea. He had noticed fatigue, dyspnea, and orthopnea for several days prior to admission.

In 1963 he was hospitalized for hypertension and an enlarged heart but had not seen a physician nor taken any specific medication since then. He drank one pint of whiskey per day for approximately 30 years.

On admission the temperature was 98 F, the pulse rate 80/min and regular, respirations 44/min, and blood pressure 238/180 mm Hg. He was alert and oriented but tachypneic. There was grade II hypertensive retinopathy without papilledema, hemorrhages or exudates. There were bilateral basilar inspiratory rales. The point of maximal impulse of the heart was in the sixth left intercostal space at the anterior axillary line with a thrust of sustained character. There were no murmurs but a third sound was present at the apex and the aortic second sound was increased in intensity. There was 1+ pitting edema of the feet and ankles.

Laboratory data included a hematocrit of 46%, a normal white blood cell count and differential. The electrolytes and BUN were normal. The glucose was 92 mg/dl. Arterial blood gases on room air: PO₂ of 66 torr, PCO₂ of 31 torr, and pH of 7.43. The electrocardiogram showed the features associated with left ventricular hypertrophy. The thoracic roentgenogram on admission displayed a large cardiac silhouette with left ventricular prominence, and mild congestion of the lungs with Kerley's B lines but no pleural effusion. Urinalysis revealed a specific gravity of 1.022, a pH of 5.0, 3+ proteinuria, two to three hyaline casts but no red cells or red cell casts.

The initial assessment was that this patient had hypertensive cardiovascular disease with accelerated hypertension and congestive heart failure but without signs of malignant hypertension. He was given a total of 80 mg of furosemide intravenously in the emergency room. After a diuresis of 2 liters the blood pressure dropped to only 210/160 mm Hg, and was unchanged four hours later. Then 300 mg of diazoxide were given intravenously resulting in a blood pressure of 200/140 mm Hg. Another bolus of diazoxide was given 30 minutes later and the blood pressure fell to 170/110 mm Hg. Methyldopa 500 mg, P.O., q 6 h and furosemide 40 mg, P.O., b.i.d. were begun. The following morning he was lethargic¹ and the blood pressure was 110/90 mm Hg, a fall from the original 238/180 mm Hg in approximately 12 hours. Digitalis was not given on

admission but only after the dosage of methyldopa was reduced and the lethargy subsided. Blood pressure finally stabilized at 140/90 mm Hg. Subsequently, proteinuria disappeared. An intravenous pyelogram was normal. He was discharged on the fifth hospital day.

JAY M. SULLIVAN, M.D.:

Recent advances in our understanding of the pathophysiology of congestive heart failure have enabled us to add additional dimensions to conventional therapy. In fact, some lines of evidence suggest that there are certain circumstances in which digitalis is not necessarily the first treatment to be used. Eventual therapeutic success depends on noting how the patient responds to the initial therapy, especially if the predisposing or exciting cause of the congested state is systemic arterial hypertension.

Absolute and Relative Contraindications To Digitalis

First of all, digitalis is a poison. There are certain circumstances where its poisonous effect is useful, for example, poisoning (blocking) the atrioventricular node in patients with atrial fibrillation and a rapid ventricular response. Other than this the first *absolute* contraindication for use of the drug is digitalis intoxication, and therein lies a problem in a city hospital like this, as well as in private practice. Patients will come to you from other sources saying they are taking medicines for their heart, and taking them regularly. However, there are many medicines for the heart: digitalis, quinidine, procainamide, antihypertensive drugs, nitrates, diuretics, all of which can cause confusion. We must be aware that someone presenting in congestive heart failure with ventricular premature beats might have digitalis toxicity. So we are hesitant to give additional digitalis under these circumstances until we can get serum digoxin levels.

Second, although rare, is digitalis allergy.

¹City of Memphis Hospital Case No. 293803. Presented Feb. 2, 1977.

When a patient on digitalis develops signs of clear-cut drug allergy, the drug must be discontinued. These are really the only two absolute contraindications to the use of digitalis.

Let us look at *relative* contraindications. The first of these is incomplete atrioventricular block. If you could give digitalis, completely block the A-V node, and still guarantee that your patient would have a heart rate above 40/min with a good stroke volume and adequate cardiac output, it would not make any difference. But since you are dealing with patients who have heart disease, such reduction of rate is undesirable. When dealing with bifascicular or suspected trifascicular block or Wenckebach's phenomenon, you must consider that digitalis may cause complete block and leave your patient with a compromised circulation.

Secondly, hypertrophic subaortic stenosis constitutes a relative contraindication to the use of digitalis. This is a dynamic, muscular stenosis. When the ventricle contracts, the obstruction in the outflow tract increases. Any inotropic agent like digitalis that increases contractility will increase the obstruction, and usually worsen the symptoms.

When the patient has previously had ventricular fibrillation, we must consider this a relative contraindication, depending on the individual circumstance. This severe arrhythmia implies a tendency to local or diffuse reentry; digitalis increases this tendency.

Determinants of Adequate Circulation

To consider in detail the circumstances under which digitalis should not be used, it is necessary to review the way circulation is controlled² and how the different factors that are involved can go awry and result in a clinical syndrome of apparent congestive heart failure and perhaps pulmonary edema. We can begin by focusing on the four important elements which determine cardiac output: *preload*, *afterload*, *contractility* and *heart rate*. The first three factors, acting together, determine stroke volume, and the heart rate times the stroke volume determines what the cardiac output per unit of time will be. Cardiac output (CO) times peripheral vascular resistance (R) determines blood pressure ($P=CO \times R$) while blood pressure and left ventricular size constitute ventricular afterload. Preload, the amount of stretch on the ventricle at the beginning of each systole, is determined by the amount of venous

return which influences how much the ventricle will pump with each beat. For example, with exercise the contraction of muscles in the legs increases venous return to the heart. The increased load is pumped back to the periphery without difficulty in the normal heart. Contractility is determined by the extent and velocity of fiber shortening at any given end-diastolic fiber length. Afterload is what the left ventricle faces as it begins to contract, and is composed of the two components which constitute wall tension. They are the size or radius of the ventricle and the impedance or pressure in the aorta which the ventricle faces when the aortic valve opens. Congestive failure can result from abnormalities in preload, contractility or afterload. If there is complete A-V block and an unusually slow ventricular rate, this may so impair total cardiac output as to lead to congestive heart failure.

In the well-known Starling relationship³ when left ventricular end-diastolic volume or pressure increases, the work of the heart which can be expressed as cardiac output also increases. In a normal heart, as venous return increases, thus increasing the diastolic filling pressure, the ventricle will generate more force and increase stroke volume. In the normal relationship, as the venous return increases, more blood is expelled until a degree of stretch is achieved beyond which output starts to fall (a normal ventricular function curve). Congestive heart failure can be defined hemodynamically as an impaired amount of stroke volume for any given level of left ventricular filling. In the malfunctioning ventricle, stroke volume, or work, will be less than in a ventricle with unimpaired contractility filled to the same extent, yielding a different (lower) ventricular function curve. The symptoms of congestive heart failure follow if contractility is sufficiently impaired. Pressure in the overfilled ventricles is transmitted back to the lungs and symptoms of a congested pulmonary circulation result. As cardiac output decreases, symptoms of forward failure, such as fatigue, also appear. Digitalis improves impaired contractility. It will shift a point on the abnormal function curve toward the normal curve so that for any given level of filling pressure a greater amount of stroke work will be generated.

Congestive Heart Failure vs. Congestion of the Circulation

I want to call your attention to the distinction

between failure of the circulation and congestion of the circulation. Circulatory failure can be cardiac or noncardiac in origin. Noncardiac circulatory failure is easy to understand. If, for example, during blood loss, sufficient blood does not return to the heart, the heart is not going to pump enough blood out and will "fail" to meet the needs of the peripheral tissues. In contrast, cardiac failure can be mechanical (valvular obstruction or regurgitation), muscular (cardiomyopathy, myocarditis), or due to arrhythmia. Further, circulatory overload can result from increased blood volume. A patient can be put into "failure" by overvigorous use of parenteral fluids. A similar problem is encountered in dealing with patients who have an excessive circulating volume because of renal failure. Such patients will frequently present with signs of congestion which are not due to failure of the heart to do its job but to an overexpanded extracellular fluid compartment from renal retention of fluid. Increased venous return or decreased peripheral vascular resistance are the mechanisms involved in the high output failure of thyrotoxicosis, A-V fistulas, anemia and beri-beri.

Another point to make in terms of categorizing patients presenting with acute pulmonary edema is the need to distinguish the *underlying* cause from the *precipitating* cause. Patients very frequently will have mild, stable heart disease and then suddenly develop acute pulmonary edema. Among the precipitating causes to be considered in such circumstances are pulmonary embolism, infection, anemia, thyrotoxicosis, pregnancy, arrhythmia, active rheumatic and other forms of acute myocarditis, bacterial endocarditis, unusual physical exertion, dietary indiscretion, particularly excessive salt load, or emotional stress. Finally, systemic hypertension can be a precipitating cause, as well as an underlying cause, and removal of the precipitating component is frequently all that is necessary to treat the state of congestion.

Special Circumstance of Hypertension And Circulatory Congestion

Studies made at the Cleveland Clinic,⁴ have shown a different relationship of intravascular or plasma volume to blood pressure in two groups of patients. In the group with parenchymal renal disease, blood pressure was dependent on volume, the crucial variable. In contrast, patients with severe diastolic hypertension without impaired renal function displayed an inverse relationship

TABLE 1
GUIDELINES FOR THE MANAGEMENT OF SEVERE HYPERTENSION AND CONGESTIVE HEART FAILURE

Severe hypertension with little or no congestion:

Afterload reduction: Nitroprusside, Diazoxide, Trimethaphan, Hydralazine, Methyldopa, and oral agents
Limited diuresis to prevent fluid retention, **not** to provoke volume depletion

Severe hypertension with congestion:

Afterload reduction: Nitroprusside, oral agents
Preload reduction: Furosemide

Severe hypertension with acute pulmonary edema

Afterload reduction: Nitroprusside
Preload reduction: Tourniquets, Furosemide, Morphine
Increase Contractility: Digoxin, Oxygen, Aminophylline

between pressure and circulating volume. They did what Guyton says they should.⁵ As their pressure went up they excreted more urine in a homeostatic effort to reduce blood volume and hence pressure. A patient who comes to the emergency room with severe hypertension without obviously impaired renal function most often has a *depleted* intravascular volume and does not need vigorous diuresis to bring him under control. I think this is the major point with which I would take issue in the management of the case presented today. What I believe to be the best way of handling the patient with acute hypertension and symptoms of congestion who does not have advanced renal failure is to rely initially on the use of afterload reduction. The drug that many of us are most frequently using to do this is sodium nitroprusside.^{6,7} This drug causes both venodilatation, thus reducing venous return (preload) and pulmonary congestion, and lessened vascular resistance (afterload). The resulting fall in arterial pressure allows the ventricle to eject a larger stroke volume, with better tissue perfusion. We have shown this in our own studies of patients with severe hypertension.^{8(Figs. 1,5)} When afterload was reduced with nitroprusside given intravenously on admission without diuretics, and followed by 200 mg to 300 mg per day of hydralazine,^{8(Fig. 1)} the peripheral vascular resistance and pressure fell dramatically, reflecting a considerable reduction of afterload. Cardiac output rose but not beyond the normal range. In contrast when diuretics and sympatholytic agents were used vigorously,^{8(Fig. 5)} the blood pressure fell but the cardiac output also fell below normal and the peripheral vascular resistance actually in-

creased. The therapy you tailor to the patient with high blood pressure and cardiac failure should remove the precipitating cause which, in the instances cited, was an acute increase in afterload. Thereafter your skill as a physician comes increasingly into play.

Patients who do not respond quickly and appropriately obviously need additional measures. So I propose here some rather broad guidelines for the management of congestive heart failure in the setting of severe hypertension (Table 1). Obviously there are other considerations relative to the management of congestive heart failure in the special setting of severe renal failure. But in a patient, such as the one presented today, who had severe hypertension with a limited degree of circulatory congestion which, when relieved,

caused a minimal fall in blood pressure, the primary thrust of therapy should be afterload reduction.

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Brachial Arteriograms...

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TABLE 3
ISCHEMIC GROUP

	Sex Male	Female	Return of Pulse	Tissue Loss	Persistent ischemic symptoms with no return of Pulse	Total
Nonsurgical	3	6	8	0	1	9
Surgical	2	3	3	1	2	5

irritation from the needle, catheter, or contrast media, the pressure injection or the thrombus is unresolved.

In the ischemic group surgically treated, one had tissue loss plus continuing symptoms in the ischemic hand; one had continued absent pulse and mild persistent ischemic symptoms; and three did well, with return of the pulse and resolution of symptoms.

In the nine ischemic cases which were not treated surgically, none had tissue loss and only one had persistent minor coolness in the hand. The others returned to normal. There was no tissue loss in the nonsurgical cases, even in those in which the pulse never returned. Eight of the nine ischemic nonsurgical cases had return of

pulse, whereas three of the five surgical cases did so (Table 3).

Summary

The overall pulse deficit risk in the entire series of 2,004 is 1.8%. Ischemic symptoms developed with the radial pulse deficit in 14 of the 2,004 cases (0.69%). Tissue loss as a result of vascular deficit occurred in only one case (0.05%) in the entire series. The brachial arteriogram appears to be a fairly safe study from the standpoint of pulse deficit and tissue loss.

Brachial arteriography carries a greater risk to the brachioradial pulse in women. (Pulse deficits occurred in the younger age groups in the women as compared to men.)

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JOHN M. MATHIS, M.Sc., M.D. and A. JAMES GERLOCK, JR., M.D.

Figure 1 is an adrenal venogram performed on a hypertensive adult. What does it demonstrate?

- (a) adenoma
- (b) aldosteronoma
- (c) pheochromocytoma
- (d) all of the above



Figure 1. Adrenal venogram performed on hypertensive adult.

Discussion

True, this adrenal venogram shows an adrenal mass lesion which could be either an adenoma producing Cushing's syndrome, an adenoma producing aldosteronism, or even a pheochromocytoma. They all appear the same on adrenal venog-

raphy, as they are all tumors which can arise in the adrenal gland and cause displacement of the normal venous architectural pattern. But couple the adrenal venogram with adrenal vein sampling techniques and you have a "dynamite" exam which is extremely accurate for all of the adrenal lesions named above. For example, the patient whose adrenal venogram is shown here presented with diastolic hypertension, increased peripheral aldosterone, lowered peripheral potassium in the absence of diuretic medication, and suppressed plasma renin activity. The adrenal venogram not only localized the adenoma to the left adrenal gland, but the adrenal vein samples for aldosterone taken just before venography showed it to be functioning, as well. The diagnosis of primary aldosteronism was then made.

In Cushing's syndrome, the adrenal venogram combined with adrenal vein samples for cortisol can be used to determine if the etiology is adrenal or nonadrenal. Nonadrenal ectopic ACTH stimulation of the adrenals causing Cushing's syndrome can be seen on adrenal venography as bilateral enlargement of the adrenal glands (hyperplasia). The cortisol levels will be elevated in the venous blood samples obtained from both adrenal glands. When the cause of Cushing's syndrome is a functioning adrenal adenoma, the adrenal venogram will localize the adenoma. Samples of venous blood from the adrenal gland containing the adenoma will show elevated cortisol levels, while the contralateral adrenal vein samples will show depressed cortisol levels. The diagnosis of a functioning adrenal adenoma causing Cushing's syndrome can then be made.

Pheochromocytomas are much more vascular tumors than the adenomas, which cause Cushing's syndrome and aldosteronism. Adrenal arteriography is then the procedure of choice in localizing these tumors. When arteriography fails to localize a pheochromocytoma, adrenal venography with sampling of the adrenal venous blood for catecholamines, should be used.

Answer: (d) all of the above.

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W. BARTON CAMPBELL, M.D.

A 72-year-old executive entered the hospital for elective repair of a right inguinal hernia. He had a history of chronic obstructive lung disease over the preceding ten years which had resulted in previous hospitalizations. On examination he was noted to have an increase in the AP diameter of the chest. The accessory respiratory muscles were hypertrophic. Expiratory phase of breathing was prolonged with "pursed lips breathing." An electrocardiogram was obtained (Figs. 1 and 2).

This electrocardiogram shows an irregularly irregular rhythm and a relatively rapid rate with R-R intervals from .34 seconds to .66 seconds. P waves are clearly present and vary in morphology. There is also a variation in the PR interval and P morphology is pathognomonic of multifocal atrial tachycardia. Note that many of the P waves in standard lead II are quite tall and peaked. They vary in amplitude with some as tall as 4 mm. These prominent inferior P forces suggest right atrial enlargement. The late QRS forces are rightward, resulting in an S wave in standard lead I. Note also that there is a prominent S in V₅ and V₆. These rightward terminal forces are commonly seen in chronic obstructive lung disease. A single premature ventricular contraction is noted. The P waves are inverted in V₁. Posterior orientation of P forces is common in chronic obstructive lung disease and does not imply left atrial enlargement in this setting. There are nonspecific ST-T wave changes.

Although it has been suggested that the electrocardiogram can be of assistance in distinguishing chronic bronchitis from emphysema,¹ in our experience this has not been of diagnostic value. Multifocal atrial tachycardia is an arrhythmia very commonly seen in patients with chronic obstructive lung disease. It does not respond well to treatment with digitalis or antiarrhythmic medications alone. The treatment of choice is correction of the underlying pulmonary problem. This patient had improvement in his cardiac rhythm with low-dose oxygen therapy and vigorous bronchial drainage program.

Final Diagnosis: (1) Multifocal atrial tachy-

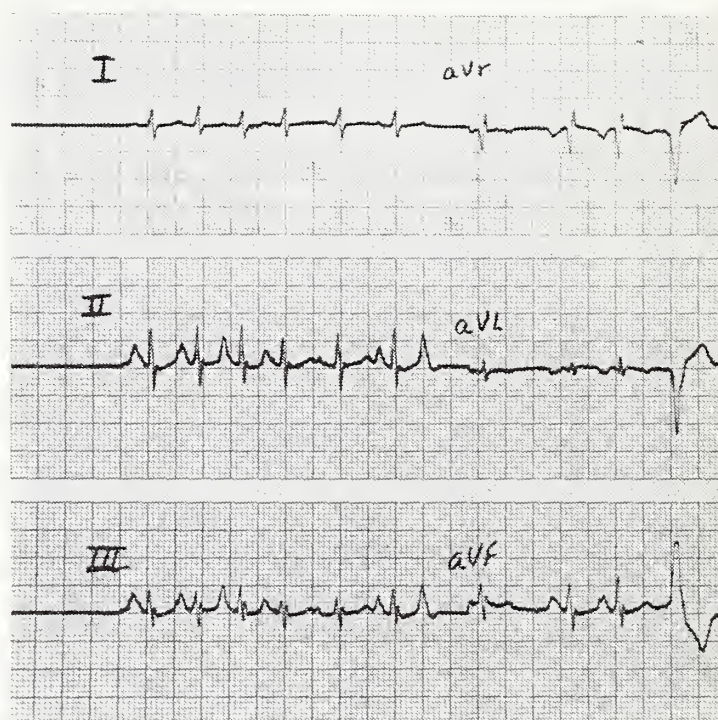


Figure 1

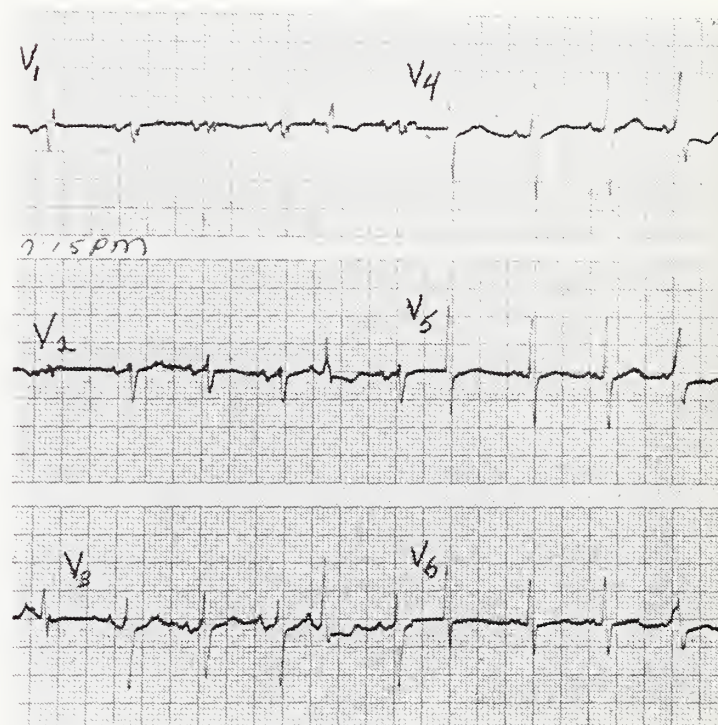


Figure 2

cardia. (2) Premature ventricular contraction. (3) Right atrial enlargement. (4) Non-specific ST-T wave changes. (5) Tracing compatible with chronic obstructive lung disease.

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The Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH)

JOSEPH J. SANNELLA, M.D.

ADH is a nonapeptide hormone elaborated in ganglion cells of the hypothalamus. It is transported to the posterior lobe of the pituitary glands along axons and is released by neural impulses.

Very small increases in plasma osmolality will trigger release. The mechanism is very sensitive and can be initiated by a 1% to 2% increase. Other mechanisms of a nonosmolar nature can powerfully stimulate hormone release. The most important are hypovolemia, pain, fever and pharmacologic agents.

The distinction between inappropriate and appropriate secretion probably should not be whether secretion is induced by osmolar changes but rather whether secretion is an attempt at homeostasis. In this broad context then, SIADH is limited to pulmonary and cerebral disorders including tumors, ectopic production, and psychoses.

SIADH classically produces hyponatremia, hypo-osmolality of plasma, urine osmolality which is inappropriately high (not maximally dilute), and a urine sodium concentration greater than 20 mEq/L. This set of findings is not pathognomonic. The diagnosis of SIADH should be a diagnosis of exclusion. It must be distinguished from other causes of hyponatremia, especially those associated with "appropriate" ADH secretion.

Hyponatremic syndromes can be conveniently divided into three major groups based on the size of the extracellular fluid (ECF) compartment (Table 1).

Hyponatremia and ECF Expansion

When hyponatremia and ECF volume expansion coexist, edema or effusions are likely to be present and the concentration of sodium in random urine specimens is usually less than 10

TABLE 1

MAJOR GROUPS OF HYPONATREMIC SYNDROMES

Hyponatremia With ECF Expansion:

- Congestive Failure
- Cirrhosis
- Nephrotic Syndrome

Hyponatremia With ECF Contraction:

- Renal loss of sodium and water
 - Diuretic Excess
 - Chronic Renal Failure
 - Salt-Losing Nephritis (rare)
 - Adrenal (mineralocorticoid) Insufficiency
- Extra-renal loss of sodium and water
 - Gastrointestinal, especially diarrhea
 - Excessive sweating with water replacement
 - Burns

Hyponatremia With Normal or Mildly Increased ECF

- Hypothyroidism
- SIADH
- Pharmacologic agents

mEq/L. In congestive failure, cirrhosis, and nephrosis, the secretion of ADH is "appropriate" since it is an attempt to restore a functionally diminished effective plasma volume.

In congestive failure, circulatory volume is actually increased, but because of reduced cardiac output there is a fall in effective arterial volume and a fall in effective renal perfusion. These stimulate ADH release and hyponatremia, and a relatively concentrated but sodium deprived urine results. If diuretics have been given, the urine sodium will probably be greater than 20 mEq/L in random samples. In this situation, if the failure is relatively occult, the unwary may be misled since classic SIADH is more closely mimicked.

Hepatic cirrhosis can present a picture similar to congestive failure. Once again, although ECF is expanded, effective plasma volume may be reduced due to fluid sequestration and hypoalbuminemia.

From Clinical Laboratories of Nashville, 2525 Park Plaza, Nashville, TN 37203.

The nephrotic syndromes are pathophysiologically complicated because of differing etiologies and severities. Therefore, stimuli for ADH secretion are likely to be multifactorial and include decreased glomerular filtration, stimulation of the renin-angiotensin system, hypoalbuminemia, and sequestration of fluid.

Hyponatremia and ECF Contraction

Diseases in this group are associated with losses of sodium and water from either renal or extrarenal sites. Edema is usually absent. The stimulus for ADH release is hypovolemia. Diuretic excess, chronic renal failure, salt-losing nephritis, and adrenal insufficiency are conditions resulting in renal losses. Random urine sodium levels are likely to exceed 20 mEq/L.

In adrenal insufficiency, the lack of mineralocorticoid hormone induces the sodium loss which ultimately leads to ADH secretion. Another effect which appears to be important is the deficiency of glucocorticoids, since these hormones antagonize the release of ADH or its end organ effect. The glucocorticoid deficiency allows ADH to exert an unopposed effect.

Extrarenal causes of hyponatremia are usually accompanied by random urine sodium levels of less than 10 mEq/L. Diarrhea, excessive sweating and burns are the common causes. Sodium and water losses severe enough to produce hypovolemia appropriately induce ADH secretion.

Hyponatremia With Normal ECF

Myxedema, SIADH and pharmacologic agents are the main considerations in this group. Urine sodium is usually greater than 20 mEq/L and edema is unlikely to be present.

The reason for hyponatremia in myxedema is not entirely clear but may be related to myxedema heart failure and/or decreased sodium reabsorption due to partial failure of the ATPase-dependent "sodium pump."

Pharmacologic agents are known to cause hyponatremia. The mechanisms are not the same for all, but many (chlorpropamide, clofibrate, carbamazepine, nicotine, isoproterenol, barbiturates, opiates, and cholinergic agents) appear to stimulate secretion of ADH.

SIADH and other causes of hyponatremia can coexist. In such situations, inappropriate ADH secretion would have to be proven either following correction of other pathophysiology or by assaying for ADH. A reliable method using radioimmunoassay has recently been introduced.

Summary

Before the diagnosis of SIADH may be considered assured, even when "classic" laboratory findings are present, one must rule out congestive failure, liver dysfunction, adrenal insufficiency, hypothyroidism, and pharmacologic (iatrogenic) causes.

COPING WITH CHRISTMAS

. . . A lot of people are like Christmas trees. They get all spruced up at Christmas, decorate their homes and businesses, and even hang wreaths in their churches. But underneath all of the tinsel and decorations they are dead, joyless, bored people. Surrounded and entwined by the symbols of Christmas, they are putting on a happy front, trying not to let the world and themselves see that they have missed the whole point of the celebration. . . .

It is interesting that so many of the Christmas celebrants miss [the point of it all]. They go about their celebrations without realizing that the King of the universe is waiting for some personal response from them. Most people are simply indifferent to Christ, some have a casual interest in Him, many reject Him outright, and only a few give Him the absolute obedience that His kingship demands. . . .

Each of us must actively draw near to God at Christmas. Caught up in the holiday season, we easily let our devotional life slip and even forget temporarily about religious things. But a Christ-centered, merry Christmas is not likely to come automatically. It comes when we plan ahead and deliberately make room for Christ in our holiday celebrations. . . .

Gary R. Collins, Ph.D.
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1975

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"The chart calls for me to give you a
massage, but this definitely is not
the doctor's handwriting!"

A Second Level of Care: Community Residential Facilities For the Mentally Retarded

There is a young man in residence at Clover Bottom Developmental Center. We won't divulge his name because of confidentiality laws. However, we will report that if a community residential program were available in the area where he was born, there would be no need for him to reside at Clover Bottom. He is one of many.

There is considerable federal support for large institutions which serve the mentally retarded. At present, many Medicaid dollars are flowing into Tennessee for support of Arlington, Clover Bottom, and Greene Valley Developmental Centers.

The concern of the Department of Mental Health and Mental Retardation is that a state institutional system which becomes dependent on such federal support finds considerable difficulty in deinstitutionalizing these mentally retarded individuals, such as the young man we have mentioned, who are capable of living in community-based residential programs. The problem develops when federal dollars cannot follow the individual back into the community.

In a recent hearing held by the President's Commission on Mental Health, recommendations were made by the department that a program be developed to provide community-based residential services. These services should include several types of facilities, such as group homes, sheltered apartments, group homes for nonambulatory persons, and specialized living units in the community. The department predicts that once established, these programs would in the long run prove more cost efficient, thereby providing services to more retarded individuals without necessarily increasing funding.

A significant factor affecting the high cost of providing Medicaid services in the United States

today is the inordinate number of mentally retarded individuals who now reside in intermediate care facilities for the mentally retarded (ICF/MR) but who do not require that level of care. Many persons institutionalized in these facilities could and should be served in smaller, less sophisticated programs.

Many federal and state dollars are expended annually to meet the stringent standards required for an ICF/MR facility. Each inappropriately placed resident represents thousands of dollars per year in wasted expenditures.

In a report to Congress by the comptroller general of the United States on Jan. 7, 1977, it was estimated that 54.5% of the residents in public institutions do not need the intensive level of care provided by these facilities. (Percentage based on survey by the National Association of Superintendents of Public Residential Facilities.) The report cites a "lack of appropriate facilities and services in communities" as the primary reason. Title XIX (Medicaid Act) is oriented toward medical care, and other programs (Title XVI and Title XX or the Social Security Act) do not meet residential needs of many who are inappropriately in ICF/MR facilities. Furthermore, present attempts to implement a 15-bed or less ICF/MR program with existing Medicaid regulations can only lead to continued controversy over standards interpretations and the intent of enabling legislation.

The department favors development of a second level ICF/MR program with separate standards reflecting the category of programs presently referred to as "15-bed or less ICF/MR" facilities, congregate living programs, hostels, group homes, and in some instances, certain sections of larger institutions. The second level of ICF/MR care

From the Tennessee Department of Mental Health and Mental Retardation, Nashville.

Continued on page 896

New Directions in Preventive Medicine

The following is based on remarks delivered by Public Health Commissioner Eugene W. Fowinkle, M.D., in a recent address to the Blount County Medical Society.

The availability, accessibility and cost of health care in this country have long been concerns of high priority for health professionals, government agencies and consumers of health services. Much has been written about the rapidly escalating costs of health care and the nature and extent of government involvement in health care delivery, though not often with any agreement.

As I study the overall national health delivery picture and in particular the role public health programs play, I am becoming increasingly concerned that we may need to rethink some of our basic directions in health care in general and public health in particular. Our health care system has concentrated its energies and resources on treatment of illness and disease, and people have become conditioned to expect miracles—organ transplants, coronary bypass procedures, chemotherapy—for our complex medical care system. We have become so conditioned in fact, that demands often outstrip the ability of the system to produce. Proposals for national health strategies have consistently approached the problem by planning to pour more and more federal funds into the purchase of medical services. Very little attention, in terms of resources, is directed toward prevention of illness, and health maintenance.

Several states, including Tennessee, have begun to reexamine current directions in health care and the overall goals of the system. I believe we can generally agree that our primary mission is the achievement of "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity," as expressed by the World Health Organization.

We can further observe that disease patterns

have changed significantly over the past 50 years, while our methods of coping with disease have remained essentially static. The traditional health care system offers personal health services to deal with the treatment and cure of disease, and public health services to emphasize the control of infectious disease. We have done very little, however, to prevent self-imposed health risks, such as automobile accidents, or to inhibit degenerative disease such as coronary disease, cancer, or stroke, all of which are among the top ten killers and cripplers nationwide and in Tennessee.

What we are saying is that public health has responded well to the needs of the population through its first one hundred or so years of official existence. Preventive health measures have been quite successful in eradicating infectious diseases such as yellow fever which once almost destroyed the city of Memphis. Today the major health risks for Tennesseans are chronic diseases and self-imposed health risks, for which effective preventive and control processes have not yet been developed.

We can perhaps get a clearer understanding of this major change by examining the patterns of living and disease at the turn of the century. In most areas of the country, and certainly in Tennessee, the economic and social base was agricultural and rural. The family was the primary unit of society, and large numbers of children were considered desirable. Environmental and living conditions were characterized by poor sanitation, poor diet, and poor communications technology resulting in independent, relatively isolated family units, and low educational levels. The primary causes of death—malnutrition and parasitic and infectious diseases—were related to the environment and lifestyles of the population. Infant mortality was high. The population structure of our neighbor state, Georgia, reflected the prevalence in 1900 of infectious diseases and early death. Three percent of the population were aged 65 and over, 45% were age 19-64, and 52% were age 18 and under.

From the Tennessee Department of Public Health, Nashville.

The picture today is drastically different. Based on 1976 figures the population reflects a much greater percentage of people 65 years old and older (9%) and a reduced percentage of young people (only 37% were 18 or under). Fifty-four percent were age 19-64. The economic and social base of our lives has changed to patterns of urban living and industrial-commercial work. The family structure has undergone some changes, and large numbers of children are no longer considered an asset. Environmental and lifestyle factors that are predominant today include stress, urbanization, congestion, affluence, society interdependence and relatively high educational levels. Infant death rates have been reduced significantly, and the primary causes of death are such things as heart disease, cancer, and accidents rather than infectious diseases. With such dramatic changes occurring in the patterns of our lives and in the health problems we face, the need to reexamine the traditional methods of coping with those problems is readily apparent.

In an attempt to redirect health policy, the Canadian Ministry of Health has advanced the "Health Field Concept" as a basis for approaching the problem. This concept states that health status is influenced by four major components: human biology, the environment, the lifestyles of people, and the health care organization.

Human biology refers to inherited, genetic factors which contribute to the overall state of health throughout the lifetime of the individual. By *environment* we mean those things that are external to the human body, and over which the individual has little or no control. These components include the individual's physical, social and economic environments. The term *lifestyle* refers to the sum of the decisions an individual has made which affect his health—the things he can control. Individual decisions that have negative impacts create self-imposed risks and enhance the likelihood of premature death or illness. Decisions that have a positive effect, such as driving within the speed limit or not smoking, can improve health and well-being throughout the individual's lifetime. Included in the term *health care organization* are all public, private, physical, mental, and environmental resources that provide health care services—the health care delivery system as we know it.

The administrators of the Canadian system have concluded that while many of the causes of illness are related to human biology, lifestyle, and

environment, the major emphasis for health programs and the major portion of resources have been focused on "crisis" health care, or acute care needs. As many people have expressed it, we have a highly developed "sick care" system rather than a means of keeping people well.

To illustrate this disparity between the factors having the greatest impact on health and well-being and the resources devoted to them, let us examine the relative proportions of funding allocated to each of the four factors influencing health status.

According to a report by G. Alan Dever, in 1974 the federal government spent \$29.2 billion for health. As we might expect, the major portion of these funds was allocated to health care organization—about 90.6%. Of the other three elements, human biology received 6.9%, environment received 1.2%, and lifestyle received 1.5% of federal health expenditures.

As Dever says, "The conclusion is obvious. Based on current procedures for reducing mortality and morbidity, it is clear that unless we dramatically shift our health policy, we will see little or no change in our present disease patterns. In fact, with our aging population we might very well see dramatic increases in mortality and morbidity."

The primary question that must be answered if we intend to achieve any real improvements in our health situation is, "How do we change our short range, hedonistic model so that diseases resulting from lifestyles may be significantly altered or reduced?" Several approaches have been suggested, the central theme being the need to influence individual behavior change.

One of the more interesting new approaches is called by various names, including "health hazard appraisal system." Basically this approach involves taking a detailed history from the individual, including hereditary factors, relevant details about the environment, and descriptions of personal habits and lifestyle features that can potentially affect health either positively or negatively. Next a physical examination is given, which includes basic health indicators such as blood pressure and weight.

This information is then fed into a computer programmed to process these details about the individual with data on the effects of certain risk factors. The result is an individualized projection of the expected length of life taking into account the risk factors which this individual has chosen

to include in his daily pattern of living. The analysis also tells the individual how much his life can be extended by elimination of each risk factor, such as smoking.

To illustrate the procedure, consider the case of Mary Jones, age 50. Statistics show that a woman of her age has a 6.6 % chance of dying in the next ten years. But Mary Jones' actual health data show that she has a greater chance of dying than her average counterpart. She has a 9.5% chance of dying in the next ten years, 43% greater than the average 50-year-old woman.

Why? Because Mary Jones has certain risk factors in her life that significantly reduce her chances of survival. The health hazard appraisal points out to her that if she can reduce her blood pressure she can add .3 years to her projected survival; that controlling drinking could add 2.2 years; that stopping smoking could add 2.4 years; that getting down to her ideal weight could add .4 years, and so on.

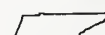
Advocates of this type of approach are hopeful that presenting the individual with actual data about his own personal situation will provide the motivation needed to change unhealthful behavior. This confrontation with personal data is certainly more dramatic and hopefully has more impact than many lectures from the physician or the public health worker on weight control, smoking cessation, etc.

At this point a new relationship may be established between the physician and his patient. If the patient has become aware of his personal

risks and has resolved to make changes, the physician then assumes leadership in guiding the patient's own actions to improve his health. Someone has compared his relationship to that of a baseball player and his manager/coach. The player is the one who takes an active role in improving his batting average while the manager/coach provides technical advice and encouragement. But the player doesn't wait for the manager to come out to home plate and bat for him; he has to take an active part if his average is to improve. Similarly, the patient must be actively involved in reducing his risks.

Several substantive studies have been done on the health hazard appraisal concept, and my staff and I plan to study the approach in more depth for its application to public health programs. We have also established a task force to analyze the top ten killers in Tennessee and to develop recommendations for redirection of some program efforts to attack these problems more effectively.

I see this sort of intensive reexamination of approach, resource allocation and program directions the most formidable challenge public health has yet undertaken. At the same time this opportunity can represent the greatest potential contribution public health has yet been able to make to the improvement of health. I look forward to the challenges of the future in public health and to an even more positive and productive working relationship with all components of our health care system, particularly with the physicians of our state.



Mental Health Report . . .

Continued from page 893

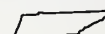
should be distinct from the existing institutional level of care, with a clearly defined population for each.

With two levels of ICF/MR care, specific disability criteria and more formal eligibility determination will have to be developed so proper placements can be made.

Such a system can only be "fine tuned" at the state level based on the peculiarities of each state's

overall system. It is the department's view that each Medicaid plan should include a proper systems control and application of standards. The plan should also be coordinated with utilization of Titles XVI and XX as they relate to other levels of care.

When the dollars which flow into the developmental centers are able to follow the patient into the community, immediate savings will accrue to the taxpayer.





DAVID H. TURNER

**president's
page**

Wealth and Happiness

It is during the holiday season when we are made most aware of the many blessings we enjoy. To have the privilege of practicing medicine in this uniquely wonderful country is truly a blessing. Practicing medicine is serving others, and those of us in the medical profession must continue to keep foremost in our minds that the best interests of our patients come first in spite of the day-to-day difficulties we encounter.

"You are richer today than you were yesterday . . . if you have laughed often, given something, forgiven even more, made a new friend today, or made stepping stones of stumbling-blocks; if you have thought more in terms of "thyself" than of "myself," or if you have succeeded in being cheerful even if you were weary. You are richer tonight than you were this morning . . . if you have taken time to trace the handiwork of God in the commonplace things of life, or if you have learned to count out things that really do not count, or if you have been a little blinder to the faults of friends or foe. You are richer if a little child has smiled at you, and a stray dog has licked your hand, or if you have looked for the best in others and have given others the best in you."

Author unknown

"Do not store up for yourselves treasure on earth, where it grows rusty and moth-eaten, and thieves break in to steal it. Store up treasure in heaven, where there is no moth and no rust to spoil it, no thieves to break in and steal. For where your treasure is, there will your heart be also.

Matthew 6:19-21

Sincerely,

David H. Turner, M.D.

PRESIDENT

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DECEMBER, 1977

personified, it is hard for us to recognize the tremendous magnetism and powers of persuasion which he had. The youth of Germany were looking for a hero, and Hitler filled the void in their empty lives. But Wagner's super-race had a fatal flaw built into it. It was greed and lust, a flaw common to mankind. Hitler failed to recognize it, and his super-race followed Valhalla into oblivion.

Someone commented recently that the trouble with the world these days is there are no heroes. When there are no heroes, heroes will be manufactured. Too often the hero is a Hitler. In this country the heroes, or perhaps hero surrogates, are, for better or worse, the stars of stage, screen, television, and the playing field. All you need to do is look at the intense overreaction to the death of Elvis Presley to see to what extent this is true. There is no question that Elvis Presley was a very talented artist. But a hero?

The most popular motion picture of the year, and one that may before it is over have claim as the most popular motion picture of all time, is *Star Wars*. Its plot and characters are those of every grade B cowboy movie ever made, but it is done with such finesse and with such incredible imagination and special effects that it has captured the fancy of young and old alike. George Lucas, its writer-director, said he wanted simply to make a movie for a change which was just fun. No message. Just fun. And it is, judging from how many people have seen it not just once but several times.

One reviewer thought the movie terrible because, he said, it is cruel, with people getting wiped out all over the place. He has a point. But there was less violence in it than in most movies or TV programs being made today, and less than in Grimm's fairy tales, Charles Dickens, or even the Bible, for that matter. There is little or no violence for the sake of violence. And anyhow, life is cruel and violent at times.

There are very few occasions when we are given a clear choice between good and evil. Hitler offered the German people so much, and did so much to build up the country, that his evil was ignored, and the people were blinded to the fact that he was sowing the seeds of their destruction. The seeds of our own destruction were being sown at the same time in the post-depression New Deal. A chicken in every pot and a car in every garage was too good a bird in the hand to pass up.

editorials

Of Stars and Star Wars

Richard Wagner spun a tale of a super-race based on Teutonic mythology, and set it to music. People either love Wagnerian opera or they hate it. Few stand on neutral ground. One of Wagner's greatest admirers was Adolph Hitler, who took the idea of the super-race proposed by Wagner and Nietzsche and sold it to post-World War I Germany. Because we now see Hitler was evil

Unlike all that, *Star Wars* offers the viewer a clear choice. The good is very, very good and the bad is horrid. Luke Skywalker and Han Solo are sure-enough heroes, even though Han's escutcheon is somewhat tarnished.

Another star once brought mankind a clear choice. That star came and stood over a stable in Bethlehem in Judea nearly 2,000 years ago, signaling the birth of One who offered man the highest choice he ever had. When Adam and Eve ate the apple, they were given to know the difference between good and evil, and how to make a clear choice. As their heirs we also know the difference. We like to see good triumph. We like to see it triumph on the screen, and anywhere else it doesn't cost us anything. But it is a lot easier to follow Elvis Presley than Jesus Christ.

To be totally dedicated always to pure good, to always choose the right whenever we can see it, costs. Sometimes it costs a lot. Only one man ever did it always, and it cost Him His life. But if we really want a clear choice, His offer still stands. It may cost a lot, but whatever it costs will never be missed. There is a big return. He will fill any void in any life. What a Christmas gift!

Merry Christmas.

J.B.T.

On Not Growing Old

It used to be widely held that the maximum speed for railroad trains (or any other means of transportation, for that matter) was 30 miles an hour, said to be the greatest speed the human body could tolerate, as above that speed the breath would be snatched away so that passengers could not breathe. Actually, horseless carriages can do a lot better than that, because even at the unlikely speeds of less than 30 miles an hour the life can be snatched out of a body in less time than it takes to say it. At more usual speeds they become even more effective snatchers.

Because this is one of our more deadly epidemics, some of those interested in preventive medicine set about to immunize against it, which should not surprise anyone. What should surprise us though is its long delay in coming, and the difficulty encountered in enlisting support for something which obviously falls into the category of motherhood and apple pie.

The fact of the matter is that like other immunizations it takes some trouble to accomplish, but unlike the others there is associated continued inconvenience, to the extent that it is a great

temptation to duck the issue by assuming, "it can't happen here." It not only can—it does. It happened to thousands of Tennesseans last year—1,100 killed and 46,000 more injured, to be specific. Twenty-two of the dead were children, making automobile accidents the leading cause of death and serious injury in children over the age of one month, and in fact in adults, too, under the age of 35 years. Startling? You bet! Deplorable? Worse!

In what could be referred to as a *tour de force*, Robert Sanders, M.D., pediatrician and health officer from Murfreesboro, took on all comers and got enacted a piece of legislation which, if enforced, will save a lot of lives in the pediatric age group. He had support from various quarters, but it was mostly lip service, and the legislation is the result of his dedication. It is known as the Tennessee Child Passenger Protection Act, signed into law by Governor Blanton on April 27, 1977. It becomes effective January 1, 1978.

Dr. Sanders has received wide acclaim from pediatrics and safety groups nationwide, as Tennessee is the first state to enact such legislation. The act requires restraint by one of the federally approved restraint systems of children under four years of age riding in a family-owned vehicle on Tennessee streets and highways. The bill has some defects, the results of compromises necessary to salvage the bill. But it is a start.

To be effective, though, it will, as with our medical prescriptions, require compliance. Compliance results mostly from education. Elsewhere in this issue Dr. Sanders has dealt with this matter as it applies to the child restraint bill. Educational programs are being vigorously pursued, but more needs to be done. To tell you what that "more" is, as far as we doctors are concerned, I quote his final statement:

"The support of the medical profession is critical for the success of this program. . . . It is hoped all physicians will thus assert themselves responsibly in this effort to immunize our young children against our highway epidemic."

J.B.T.

Look that Gift Horse in the Mouth!

The giving of gifts at this season of the year is ingrained tradition in Western culture, not just for Christians, but for Jews and pagans as well. Christians follow the example of the Magi, who gave gifts to God's gift to mankind. The Jew celebrates the Feast of Lights, and the pagan does

homage to Santa Claus, the ghost of Christmas past, present, or future, or simply to the economy. But almost everyone, one way or another, celebrates the season with the giving of gifts. Friends, I have to report, in case you don't know it, the whole thing has gotten out of hand.

When I was growing up, after the Thanksgiving turkey had time to settle down and turn to calories, people began to give some thought to Christmas. Street decorations went up around the first of December, and toy departments began to revive. It all built up to a climax on Christmas Eve, with a rush of last minute shopping, with lots of merriment and shouts of "Merry Christmas." By contrast, Marshall Field's toy department was bursting at the seams in mid-September, and by mid-December everyone will be tired of the whole thing. But that is not what this editorial is about.

A few weeks back (also in September) a local newspaper carried a full page ad for a video computer system which "plays games with endless variations with you and your family. . . . Included is 'Combat Game,' . . . with over 27 action-packed game variations." But that still isn't it. As a part of the ad there was a half-page comic strip entitled "Battlin' Buddies." Or at least they started out buddies—two grown men "choosing their weapons," glaring at each other diabolically (all in good clean fun naturally) and ending with one saying to the other, "You know, Harry, you have a vicious side to your nature!"

With such help, why not?

Maybe it's too late to do anything about the adults. But the last frame of the comic strip shows a youngster saying, "OK, Dad. Now I guess you're ready to take on the champ!"

Maybe all we can do is try to preserve life and limb, and ignore for the moment those psychological traumas. Maybe the psychologists are right, and this gives an outlet for aggressiveness which is more acceptable than some other forms (provided, of course, it doesn't lead to those others).

But please, folks, at least let's encourage our patients (and each other) to choose toys that are safe. No small toys that can be swallowed, and no toys with rough or sharp edges. Baby's toys should be too large to put in the mouth, washable, lightweight, and nonbrittle. Toys with projectiles (air rifles, archery sets, sling shots, etc.) should be, if not altogether interdicted, at least closely monitored. Christmas tree ornaments

are potentially hazardous, especially electric lights. Check the wiring carefully.

Though injuries from toys constitute another minor epidemic, Cassandras are objects of derision. But it's funny only until it's your child who loses an eye from a BB gun or it's your Christmas tree which catches fire and cremates your granddaughter.

There's always talk about a sane, safe Fourth of July. How about Christmas?

J.B.T.



Nicholas G. Forlidas, age 44. Died October 22, 1977. Graduate of the Medical College of South Carolina. Member of Chattanooga-Hamilton County Medical Society.

Oscar Nelson, age 87. Died October 24, 1977. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

Phineas J. Sparer, age 78. Died October 9, 1977. Graduate of Tulane University School of Medicine. Member of Memphis-Shelby County Medical Society.

Harwell Wilson, age 69. Died October 10, 1977. Graduate of Vanderbilt University School of Medicine. Member of Memphis-Shelby County Medical Society.



The JOURNAL takes this opportunity to welcome these new members to the Tennessee Medical Association.

**CHATTANOOGA-HAMILTON COUNTY
MEDICAL SOCIETY**

Glenn K. Blackburn, M.D., Chattanooga
William J. Moss, M.D., Chattanooga
Ernest L. Posey, III, M.D., Chattanooga

GILES COUNTY MEDICAL SOCIETY

Anne M. Rasche, M.D., Pulaski
Richard Rasche, M.D., Pulaski

MARSHALL COUNTY MEDICAL SOCIETY

Stephen H. Sherman, M.D., Lewisburg

**MEMPHIS-SHELBY COUNTY
MEDICAL SOCIETY**

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Charles H. Hubbert, M.D., Memphis

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Bruce E. Day, M.D., Nashville
Rupert A. Francis, M.D., Nashville
Ronald S. Gable, M.D., Nashville
David L. Gunn, M.D., Nashville
Thomas J. Huber, M.D., Madison
Samuel B. Hunter, M.D., Nashville
Michel E. Kuzer, M.D., Nashville
Adelisa Penlilio, M.D., Nashville
Wen-Tsai Shiao, M.D., Nashville
Dean G. Taylor, M.D., Nashville
John G. Thompson, Jr., M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Byron D. Campbell, M.D., Kingston

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY

John T. Gibson, M.D., Bristol
Ebert M. Mohler, M.D., Jonesboro

personal news

The following Memphis physicians have been elected Fellows of the American College of Surgeons: *John R. Crockarell, M.D., H. David Hickey, Jr., M.D., Ronald E. Hubbard, M.D., Albert E. Laughlin, Jr., M.D., William R. Little, Jr., M.D., John C. Morrison, M.D., James G. Murphy, M.D., Kenneth D. Sellers, M.D., William V. Shappley, Jr., M.D., Martin C. Shea, Jr., M.D., Robert P.N. Shearin, M.D., Robin M. Stevenson, M.D., and Rodney Y. Wolf, M.D.*

Jeff Bethurum, M.D., a 34-year-old surgeon, was elected the new mayor of the city of Franklin.

Neil Brown, M.D., Chattanooga, has been elected president of the newly formed Chattanooga-Hamilton County Epilepsy Foundation.

John Derryberry, M.D., Shelbyville, was elected chairman of the board of the American Academy of Family Physicians at its annual meeting in Las Vegas.

Houston Lowry, M.D., and his wife, Freida, were paid tribute by the community of Madisonville, in recognition of their dedicated service to that community for the past 22 years. A proclamation signed by Mayor Leon Harvey designated Oct. 22, 1977 as "Freida and Houston Lowry Day" and the couple was presented with a plaque to express the community's appreciation.

Ralph F. Morton, M.D., Kingsport, has been elected to the board of governors of Hospital Corporation of America.

J. R. Rogers, M.D., Lenoir City, was awarded a special plaque from Lenoir City Mayor Charles Eblin on behalf of the Shriners Hospital in recognition of "his generosity and interest in helping the Shrine Hospital for Crippled Children."

Walter Stephenson, M.D., Gallatin, has been awarded the Gallatin Sertoma Club's Service to Mankind Award in recognition of his long-time efforts as team physician for Gallatin High School's athletic teams and his medical service to the community.

national news

From the AMA's Office in Washington, D.C.

Anti-Fraud Laws for Medicare

President Carter has signed into law stiff penalties for providers who are found guilty of fraud in the Medicare and Medicaid programs.

The new law levies felony penalties to a maximum \$25,000 fine and five years in prison replacing the misdemeanor penalties of up to a \$10,000 fine and one year in prison.

The bill passed overwhelmingly by Congress and sent to the White House is aimed at providers and retains misdemeanor penalties for recipients convicted of defrauding the programs. It was the first major health bill of the administration to become law.

Providers found guilty of fraud and abuse will be treated as felons and punished by up to five years in jail and/or a fine up to \$25,000. Previous law considered such violations as misdemeanors rather than felonies.

Illegal "kickbacks" among providers are defined and institutions are compelled to submit ownership data to the government. One of the main targets of the bill was so-called Medicaid mills and kickbacks uncovered in several large cities.

The disclosure requirements do not apply to individual physicians or to groups of physicians.

States must form anti-fraud units separate from their health departments in order to qualify for Medicaid funding.

Other provisions: (1) States can supersede PSRO activities covering Medicaid if they demonstrate to the federal government that PSROs are making decisions that "have a detrimental effect" on state Medicaid spending. (2) The Health, Education & Welfare Department was given the authority to select regional or national intermediaries if it concludes that existing intermediaries within a state are doing a poor job. (3) Most Medicaid reimbursement would have to be made within 30 days by the states.

An amendment giving HEW power to initiate suits was dropped from the measure by House-Senate conferees, but Rep. Paul Rogers (D-Fla.) said Attorney General Griffin Bell had informed him that the FBI was training 350 agents to audit Medicare and Medicaid records. Rogers is chairman of the House Commerce Subcommittee on Health.

Sen. Herman Talmadge (D-Ga.), chairman of the Senate Finance Subcommittee on Health, said the bill is a "clear, loud warning to thieves and crooks that will be heard in unmistakable tones."

Meanwhile, HEW Secretary Joseph Califano told a television panel show that taxpayers are losing at least \$1 billion a year through payments to ineligible people. Califano denied reports HEW is abandoning "project integrity," declaring that 2,500 cases of provider fraud are being investigated on a state-by-state basis for possible prosecution.

No Cost Cap Seen This Year

Final Congressional hearings on the administration's stumbling hospital cost containment program have been conducted by the Senate Finance Committee and all indications are that no legislation will be enacted this year.

Subcommittee Chairman Herman Talmadge (D-Ga.) has said his information from the House side was that representatives are not "overly optimistic" the House will move before the end of the current session.

In an opening statement, Talmadge said he feared the administration's proposed 9% "cap" on all hospital revenues could harm efficient hospitals. "Irreparable harm" could befall the hospital system, the senator said. "While there are many obese hospitals, there are many lean ones," he said. "I don't want to put all hospitals on a 1,200-calorie-a-day diet."

Talmadge said his staff has drawn up a set of recommendations for an approach melding some of the administration's ideas with Talmadge's own long-standing proposal for a thorough overhaul of Medicare and Medicaid hinging on prospective reimbursement for hospitals to encourage efficiency.

The importance attached to the issue by the administration was evident from a letter sent by President Carter to Talmadge and House health subcommittee chairmen, Reps. Dan Rostenkowski (D-Ill.) and Paul Rogers (D-Fla.), declaring that "one of my most important priorities is to secure strong legislation to restrain the skyrocketing increase in health care costs." Carter said "I wish to reaffirm my strong personal commitment to the administration's hospital cost containment legislation."

The first witness before Talmadge was HEW Secretary Joseph Califano who charged that if Congress delays passage another four months "there will be an additional inflation of \$2.8 billion in hospital costs." I must underscore again the enormous adverse impact on our health care system caused by continued delays. . . .

Continuing his assault on hospitals, Califano said many institutions "are wallowing in ice cream, candy and cake."

"Our citizens simply cannot afford this mindless, inexorable spiraling of health expenditures that impoverish other needed health care programs and send the costs of medical care out of sight," said the HEW secretary.

The AMA told the subcommittee that a "cap" is "manifestly unfair" and would discourage hospitals from improving services. Robert B. Hunter, M.D., chairman of the AMA Board of Trustees, said the more admissions a hospital has "the more likely it is to be penalized."

"Artificial limitations, irrespective of how generous or how restrictive, are unrealistic," said Dr. Hunter.

The bill includes medical equipment in physicians' offices under capital expenditure limitations when the cost is above \$150,000. This provision "is both unjustified and unsupportable," said the AMA witness. "Such a limitation would prove onerous, especially for physicians first opening practices as well as for those desiring to modernize offices in order to assure continued quality patient care."

The subcommittee was urged to keep in mind "that full access to quality care for those individuals needing health care services requires appropriate resources. Dr. Hunter said "arbitrarily limiting resources—both physical and financial—affects not only access, but also quality. He suggested any cost containment plan be started as a local experiment to determine its workability.

John Alexander McMahon, president of the American Hospital Association, told the subcommittee that the administration bill "would seriously jeopardize the present and future ability of hospitals to provide quality care to the American people."

Applying a uniform cap on all hospitals "would exert the heaviest pressures where they are least appropriate—on the most efficient hospitals," said McMahon. These facilities would be forced to curtail essential services, according to McMahon.

Hospitals purchase and use many services and goods that rise faster in cost than the rest of the market, McMahon testified. Of the 15% rise in hospital costs last year, 10% was purely the result of inflation and 5% "resulted from increased intensity and improvement in patient care."

Sen. Richard Schweiker (R-Pa.) urged consideration of his measure that promotes state programs to control costs. "With a little encouragement and assistance from the federal government, the states can achieve greater actual savings in a far more equitable manner than a uniform system administered from Washington, D.C.," he said.

Too Much Surgery?

The Congressional investigation of whether there is too much surgery has boiled down to a question of whose study to believe and whose interpretation is correct. Rep. John Moss (D-Calif.), chairman of the House Commerce Subcommittee on Oversight, insists there is far too much surgery despite protests from many physicians and evidence from studies that his contentions are overblown.

Moss attacked the conclusions of a study headed by Ralph Emerson, M.D., president of the New York State Medical Society, that less than 1% of major operations are being performed with less than usually accepted indications.

Moss and his subcommittee have been relying on another study that 17% of surgery is not required, extrapolating that there are 2.4 million unnecessary operations yearly and 11,900 deaths from these procedures.

The Emerson study, underway since the late 1960s, used preset criteria for monitoring quality

of surgical care, criteria prepared by four state medical schools, the state department of health and the state medical society. In addition to finding less than 1% of major operations questionable, the study found 2% or 3% of minor surgery in this category.

Karl Pfuetze, M.D., a cardiologist from Kansas City and an expert on surgical statistics, testified that the so-called McCarthy study was employed erroneously by the subcommittee. The finding of a 17% difference of opinion on whether surgery should be performed stems only from the fact that there will be a range of from 10% to 20% of differing opinion for much elective surgery, said Dr. Pfuetze.

He said that if every surgeon sought the opinion of ten other surgeons on each case, there would often be one or two or three dissenters. But the majority judgment in such cases would be accepted. However, seeking these consultations separately for each case would result in a difference of opinion ranging from 10% to 30%.

Said the witness:

"Previous alarming calculations of so-called unnecessary surgery have been based on estimates, misunderstandings of the mathematical implications of experimental design, a lack of understanding about what really produces a difference of opinion between physicians. The result of these factors has produced a 700% to 1700% overestimate of so-called unnecessary surgery and a 3700% overestimate of unnecessary deaths.

"I do not believe that it serves any useful purpose to continue to assume that the previous figures on unnecessary surgery are either accurate or useful."

C. Rollins Hanlon, M.D., director of the American College of Surgeons, said "The College recognizes the need to consider the complexity and cost of surgical procedures as well as the need for broad knowledge of surgical biology, diagnostic skill and operative skill to make the patient safe for the operation and the operation safe for the patient.

"These needs dictate our continued insistence on long and exacting education for surgeons, rather than casual, on-the-job training, as inappropriate to modern surgery as the competence of the occasional weekend pilot to take over the controls of a 747. Scrupulously careful delineation of privileges based on education, peer appraisal of skills, and certification of specific competence will remain the most reliable basis for appropriately recommended and safely performed operations by genuine surgeons, rather than casual operators."

Saccharin Ban Delayed

The House has gone along with the Senate and approved an 18-month postponement of the proposed FDA ban on use of saccharin. The vote was 375 to 23. Differences in labeling requirements will have to be resolved before the bill is sent to the White House.

The Senate wants saccharin products to carry a label cautioning that the sweetener causes cancer in animals and may increase people's risk. The House bill only requires a notice at the store where the product is sold.

Rep. Andrew Maguire (D-N.J.) during floor debate suggested sarcastically there should be an "assurance label" that reads:

"Saccharin does not cause cancer in the opinion of your Congressman despite scientific evidence that it does."

On the other side, Rep. Samuel Devine (R-Ohio) told the House "not long ago we had a scare about cranberries. Then it was cyclamates and just this weekend someone said my vegetables might cause cancer. My God, are we going to ban vegetables because they might cause cancer?"

AMA Declines to Testify on Competition

The AMA has informed Sen. Edward Kennedy (D-Mass.) that it could not testify at hearings on competition in the health care field because the issues coincide with those posed at a trial now in progress before the Federal Trade Commission.

The hearing was called off by Kennedy. Among other witnesses slated to testify that day was Michael Pertschuk, FTC commissioner. Kennedy planned to go ahead later with such hearings before an unusual joint session of two subcommittees he heads—Senate Human Resources Subcommittee on Health and the Senate Judiciary Subcommittee on Antitrust and Monopoly.

Kennedy had no comment on the AMA's refusal to testify.

In a letter to the senator, the AMA said questions by Kennedy in a letter to the AMA and the issues to be addressed "are essentially the same as the issues now on trial before an administrative law judge of the FTC.

"For this reason," wrote AMA Executive Vice President James H. Sammons, M.D., "the association has been advised by legal counsel not to appear to present testimony. . . ." When an issue is involved in litigation, testimony on the same subject before Congress could jeopardize the legal position of the witness.

Dr. Sammons said that the AMA's stand on the primary issue of regulation and competition can be provided for the record. The association has long advocated "a pluralistic system of health care with free competition among all practitioners whether practicing alone, in groups, or as salaried or contracting physicians in HMOs" (Health Maintenance Organizations), said the AMA.

Kennedy also was informed that the AMA "strongly advocates" consumer information including standard fees charged by physicians. "The association remains opposed to self-laudatory statements or claims such as testimonials and nonverifiable statements or claims."

The chief issue before the FTC is the AMA's code against unethical advertising by physicians.

Dr. Sammons said government regulation of the supply of physicians and their distribution by specialty "would have an unpredictable and detrimental impact upon the future quality of care."

The AMA letter continued:

"The issues of quality of care and cost of care are not separate and unrelated and are not independent from the issue of availability of services. These three elements of medical care are somewhat like a tripod in that alteration of one will cause an imbalance or instability of the other two. Too frequently, congressional approaches to cost problems result in reduction of available technology, benefits, and access to quality care."

A tug-of-war situation has developed within the federal government with some agencies promulgating ever more stringent regulation of the medical profession while other agencies demand removal of any professional self-regulation and relaxation of government regulation, Dr. Sammons declared.

Racial Health Differences

A Congressional Budget Office (CBO) study reports that non-whites are less healthy than white persons. Non-whites experience nearly 50% more bed disability days, 70% higher infant mortality and a life expectancy six years shorter than that of whites the study said.

White persons make about 10% more visits to doctors than non-whites.

Although the proportions of whites and non-whites hospitalized each year varies little, non-whites tend to remain in the hospital longer because they are sicker, particularly poor non-whites, according to the CBO.

The study, "health differentials between white and non-white Americans" is part of a series of CBO studies on racial inequalities. It concludes that the health of non-white persons has improved during the last 20 years, but has not caught up.

The health of non-whites is not as good as that of whites, yet non-whites get less and possibly less-effective health care than whites do," the study said.

CBO's study, based on published and unpublished data about various health care indicators and their relationship to race, found that a non-white is 60% more likely to die of flu or pneumonia and five times as likely to die of tuberculosis.

The non-white male or female is nearly twice as likely to die of cirrhosis of the liver and more than seven times as likely to be a victim of homicide,

both of which indicate social or psychological problems, the study said.

Non-whites included blacks, American Indians and Orientals.

announcements

CALENDAR OF MEETINGS

NATIONAL

1978

- Jan. 11-14 National Symposium on Head and Neck Cancer, San Francisco Hilton Hotel, San Francisco
- Jan. 11-14 Nuclear Medicine—Ultrasound—Computerized Tomography, A Confrontation, Disneyland Hotel, Anaheim, California
- Jan. 15-19 Pan American Cancer Cytology Congress, Caesar's Palace, Las Vegas
- Jan. 22-26 Mid-Winter Clinical Convention In Ophthalmology and Otolaryngology, Los Angeles
- Jan. 23-25 Society of Thoracic Surgeons, Sheraton Twin Towers, Orlando, Florida
- Jan. 23-27 Southern Clinical Neurological Society, El Conquistador Hotel, Las Croabas, Puerto Rico
- Jan. 25-28 Southern Society for Pediatric Research Braniff Place, New Orleans
- Jan. 28-Feb. 3 American Society of Contemporary Medicine and Surgery, Americana Hotel, Bal Harbour, Florida
- Feb. 8-12 American College of Psychiatrists, Royal Sonesta, New Orleans
- Feb. 9-11 Society of University Surgeons, Galt House, Louisville
- Feb. 19-22 Southeastern Surgical Congress, Fairmont Hotel, New Orleans
- Feb. 22-23 American Orthopaedic Society, Dallas
- Feb. 22-26 American Association of Genito-Urinary Surgeons, Ocean Reef Club, Key Largo, Florida
- Feb. 22-26 American College of Nuclear Physicians, San Francisco
- Feb. 23-28 American Academy of Orthopaedic Surgeons, Convention Center, Dallas

TENNESSEE MEDICAL ASSOCIATION
143RD ANNUAL CONVENTION
April 12-15, 1978
Hyatt Regency, Knoxville, Tennessee

The continuing medical education accreditation program of the TMA has full approval by the Liaison Committee on Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital or society may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, 112 Louise Ave., Nashville, TN 37203.

IMPORTANT NOTICE

Published in this section are all educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

IN TENNESSEE

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

Clinical Training Program For Practicing Physicians

Opportunities for advanced clinical education for physicians in family practice and in various subspecialties have been developed by the School of Medicine and the Division of Continuing Education of Vanderbilt University. The practicing physician, with the guidance of the participating department chairman, can plan an individualized program of one to four weeks to meet recognized needs and interests. The experience will include contact with patients, discussion with clinical and academic faculty, conferences, ward rounds, learning individual procedures, observing new surgical techniques, and access to excellent library resources. Experience in more than one discipline may be included.

Participating Departments and Divisions

Allergy & Immunology	Samuel Marney, M.D.
Anesthesiology	Bradley E. Smith, M.D.
Cardiology	Gottlieb C. Friesinger, III, M.D.
Chest Diseases	James D. Snell, M.D.
Clinical Pharmacology	John A. Oates, M.D.
Dermatology	Lloyd King, M.D.
Diabetes	Oscar B. Crofford, M.D.
Endocrinology	David Rabin, M.D.
	David N. Orth, M.D.
Gastroenterology	Steven Schenker, M.D.
General Internal Medicine	W. Anderson Spickard, M.D.
Hematology	Sanford B. Krantz, M.D.
Infectious Diseases	Zell A. McGee, M.D.
Medicine	Grant W. Liddle, M.D.
Neurology	Gerald M. Fenichel, M.D.
Obstetrics & Gynecology	Lonnie S. Burnett, M.D.
Oncology	Robert Oldham, M.D.
Orthopedics	Paul W. Griffin, M.D.

Pathology	William H. Hartmann, M.D.
Pediatrics	David T. Karzon, M.D.
Psychiatry	Marc H. Hollender, M.D.
Radiology	A. Everette James, Jr., Sc.M., J.D., M.D.
Renal Diseases	H. Earl Ginn, M.D.
Rheumatology	John S. Sergent, M.D.
Surgery	
Cancer Chemotherapy	Vernon H. Reynolds, M.D.
General	H. William Scott, Jr., M.D.
Neurological	William F. Meacham, M.D.
Ophthalmology	James H. Elliott, M.D.
Oral	H. David Hall, D.M.D.
Pediatric	James A. O'Neill, M.D.
Plastic	John B. Lynch, M.D.
Renal Transplantation	Robert E. Richie, M.D.
Thoracic & Cardiac	Harvey W. Bender, M.D.
Urology	Robert K. Rhamy, M.D.

Eligibility: All licensed physicians are eligible.

Administrative Fee: \$200.00 per week.

Credit: American Medical Association Physician's Recognition Award (Category 1) and American Academy of Family Physician's Continuing Education accreditation.

Application: For further information and application, contact: Paul E. Slaton, M.D., Director, Continuing Education, 305 Medical Arts Building, Nashville, TN 37212, Tel. (615) 322-2716.

Continuing Education Schedule 1978

Jan. 27	Annual L. W. Edwards Memorial Lecture (1 hour)
March 5-10	Radiology Update 1978 (23 hours)
March 17-18	Annual Meeting, Southern Society of Physical Medicine and Rehabilitation
March 22-24	Clinical Endocrinology: Update 1978 (20 hours)
March 27	7th Annual James C. Overall Visiting Lectureship—Pediatric Pulmonary
April 19-21	Legal Aspects of Radiology (co-sponsored by School of Law)
April 21	Annual Barney Brooks Lectureship in Surgery (1 hour)
April 22	Annual Scott Surgical Society Lectureship
April 27	Annual Frank E. Luton Lecture in Psychiatry (1 hour)
April 28-29	Symposium on Clinical Gynecology
Spring, 1978	Update in Management of Urologic Malignancies—Annual Cancer Symposium (12 hours)
May 18-19	17th Annual Seminar in Psychiatry (for nonpsychiatrists)
May, 1978	Postgraduate Course in Allergy
May, 1978	Scientific Sessions of the Vanderbilt Medical Alumni Reunion (6 hours)

July 6-9 Contemporary Clinical Neurology,
Hilton Head, S.C. (16 hours)

For information contact: Vanderbilt Continuing
Education, 305 Medical Arts Building, Nashville,
TN 37212, Tel. (615) 322-2716.

NATIONAL ATHLETIC TRAINERS ASSOCIATION

Professional Preparation Conference

Jan. 7-8 Basic Athletic Training Education
(co-sponsored by Sports Safety &
Health Care Society)—Opryland
Hotel, Nashville. *Fee*: NATA mem-
bers, \$35; nonmembers, \$70. Pre-
registration required by Dec. 23.

For information contact Jack Redgren, Head
Athletic Trainer, Vanderbilt University, Nashville,
TN 37212.

UNIVERSITY OF TENNESSEE CLINICAL EDUCATION CENTER

Chattanooga

Continuing Education Schedule 1978

- Jan. 17 Prophylactic or Preventive Antibiotic
Usage—McMinn-Monroe County Med-
ical Society
- Mar. 2-3 Clinical Orthopedics—Chattanooga
- Mar. 20-23 Diagnostic Radiology for Emergency &
Family Physicians—Lake Tahoe, NV
- Mar. 21 Respiratory Infections—McMinn-
Monroe County Medical Society
- Apr. 14-15 Pediatric Course—Chattanooga
- Apr. 18 Postsurgical Infections—McMinn-
Monroe County Medical Society
- May 4-6 Basic Cardiology—EKGs & Therapy
for the Primary Care Physician—
Chattanooga
- May 16 Helminthic & Parasitic Infections Re-
quiring Intermediate Hosts—McMinn-
Monroe County Medical Society
- June 14-20 OB/GYN Course—Humacao, Puerto
Rico

For information contact: LeRoy J. Pickles, Direc-
tor, Continuing Medical Education, Suite 400, 921
E. 3rd St., Chattanooga, TN 37403, Tel. (615)
756-3370.

UNIVERSITY OF TENNESSEE CENTER FOR THE HEALTH SCIENCES

Memphis Unit

- March 13-15 The Infertile Female: Practical
Aspects of Diagnosis and Manage-
ment—Holiday Inn-Rivermont, Mem-
phis. *Credit*: 20 hours AAFP elective

and 25 cognates ACOG. *Fee*: prac-
ticing physicians, \$175; physicians in
training, \$100.

For information contact: Division of Continuing
Education, TCHS, 800 Madison Ave., Memphis, TN
38163, Tel. (901) 528-5547.

EAST TENNESSEE CHILDREN'S HOSPITAL

April 18-19 A Day and One Half of Practical
Pediatrics

May 2-3 Pediatric Infectious Diseases

For information contact: Karen Lee Shields,
Committee on Continuing Medical Education, East
Tennessee Children's Hospital, 2018 Clinch Ave.,
Knoxville, TN 37916.

IN SURROUNDING STATES

UNIVERSITY OF KENTUCKY

Mini-Residencies for Medical and Surgical Practitioners in Office Management Of Emotional Problems

The objective of this course is to give physicians
an ideal emotional counseling technique that fits
busy office practices. The technique uses a concept
of emotions that is consistent with human anatomy
and psycho-physiology. Yet, the technique requires
no more physician time or patient cost than routine
evaluations of new patients. Finally, the technique is
readily understandable and easy for practitioners to
apply.

One, two and three week courses. Minimum of
40 hours per week. *Tuition Fee*: \$350 per week for
the 1st & 2nd week of training; \$500 for 3rd week
of supervised practice with patients in the Intensive
RBT Treatment Program.

For further information contact: Maxie C.
Maulsby, Jr., M.D., Office of Continuing Medical
Education, Dept. of RBT, University of Kentucky,
Lexington, KY 40506.

Continuing Education Schedule 1978

- Jan. 11-13 Medical Ethics—Galt House, Louis-
ville, Ky. (Co-sponsored by Univer-
sity of Louisville.) *Credit*: 17 hours
AMA Category 1.
- Feb. 3-4 Burn Symposium—Hyatt Regency
Lexington, Lexington, Ky. *Credit*: 9
hours AMA Category 1. *Fee*: physi-
cians, \$75; nurses and physical ther-
apists, \$35.
- Feb. 19-24 Eighth Family Medicine Review: Ses-
sion III—Hyatt Regency Lexington,
Lexington, Ky. *Credit*: 50 hours AMA
Category 1 and AAFP. *Fee*: \$295.

- April 14-15 Diabetes Control: Why and How—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 9 hours AMA Category 1. *Fee:* \$75.
- April 18-25 Controversies in Care (Obstetrics & Gynecology)—Location: Maui, Hawaii (leaving from Cincinnati, Ohio). *Credit:* 30 hours AMA Category 1. *Fee:* \$850.
- May 4-5 Medical and Behavioral Problems in Older Persons—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 12 hours AMA Category 1. *Fee:* \$80.
- May 17-19 Surgical Diseases in Children: Radiologic Evaluation and Operative Correlation—Hyatt Regency Lexington, Lexington, Ky. *Credit:* 15 hours AMA Category 1. *Fee:* physicians, \$180; residents, \$90.

For information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, KY 40506.

UNIVERSITY OF LOUISVILLE

- Feb. 24-25 4th International Symposium on Psychopharmacology—Health Sciences Center, Louisville.

For information contact Herman C. B. Denber, M.D., Ph.D., P.O. Box 35260, Louisville, KY 40232.

UNIVERSITY OF MISSISSIPPI

- March 9-11 Surgical Forum V—Holiday Inn Downtown, Jackson, Miss.

For information contact: Continuing Education, University of Mississippi Medical Center, 2500 N. State St., Jackson, MS 39216.

MEDICAL COLLEGE OF GEORGIA

- Jan. 3 Cardiology
- Jan. 18-19 Hypertension: Recent Advances in Drug Treatment. *Credit:* 13 hours AMA Category 1; AAFP pending. *Fee:* \$85.
- Feb. 7 Pediatrics
- Mar. 7 Metabolic Diseases
- Mar. 7-10 Emergency Medicine: The First 90 Minutes—Tamarron Resort, Durango, Colo. *Credit:* 15 hours AMA Category 1; AAFP pending. *Fee:* \$150.
- Apr. 4 Gastroenterology
- May 2 Orthopedics and Pathology

For information contact: Division of Continuing Education, Medical College of Georgia, Augusta, GA 30901.

BOWMAN GRAY SCHOOL OF MEDICINE

Courses in Ultrasound

Two eight-week postgraduate courses in sonic medicine at Bowman Gray School of Medicine will be offered on the following dates: Jan. 9-March 3 and April 3-May 26, 1978. *Credit:* 30 hours per week in AMA Category 1. Two additional two-day real time courses are offered for obstetricians on March 9-10 and June 1-2, 1978. *Credit:* 10 hours per day in AMA Category 1.

For information contact: James F. Martin, M.D., Director, Center for Ultrasound, Bowman Gray School of Medicine, Winston-Salem, NC 27103.

OF SPECIAL INTEREST

NETWORK FOR CONTINUING MEDICAL EDUCATION

Schedule for Upcoming Programs

- Dec. 12-25 The Initial Management of Multiple Trauma—with Clement A. Hiebert, M.D., Maine Medical Center, Portland, Oregon.

Accidental Hypothermia: A Consideration and a Priority—with Cameron C. Bangs, M.D., Willamette Falls Community Hospital, Oregon City; and University of Oregon Health Science Center, Portland, Oregon.

Recent Advances in the Management of Peptic Ulcer Disease—with Henry J. Binder, M.D., Yale University School of Medicine, New Haven, Connecticut.

- Dec. 26-
Jan. 8 Reducing the Operative Risk of Elective Surgery: Influence of Age and Cardiovascular Disease—with Hiram C. Polk, Jr., M.D., chairman, Department of Surgery, John S. Spratt, Jr., M.D., deputy director, Cancer Center, and Donald E. Fry, M.D., University of Louisville School of Medicine.

Reducing the Operative Risk of Elective Surgery: Influence of Diabetes, Pulmonary, Renal and Liver Diseases—with Hiram C. Polk, Jr., M.D., John S. Spratt, M.D., and Carl O. Knutson, M.D., director, Surgical Endoscopy Center, University of Louisville School of Medicine.

Reducing the Operative Risk of Elective Surgery: Influence of Nutritional State and Use of Medications—with Hiram C. Polk, Jr., M.D., John S. Spratt, Jr., M.D., and Neal Garrison, M.D., Uni-

versity of Louisville School of Medicine.

- Jan. 9-22 Frostbite: Decrease Tissue Loss—with Cameron C. Bangs, M.D., Willamette Falls Community Hospital, Oregon City, and University of Oregon Health Science Center, Portland.
- Vulvovaginal Candida, Alias Monilia—with Leonard J. Cibley, M.D., Department of Obstetrics and Gynecology, Boston University School of Medicine and Harvard Medical School.
- The Overgrown Infant: An American Problem—with Myron Winick, M.D., director, Institute for Human Nutrition, Columbia University College of Physicians and Surgeons.

U.S. VIRGIN ISLANDS MEDICAL SOCIETY

- Jan. 26-28 Third Mid-Winter Virgin Islands Clinical Conference (in association with faculty of Johns Hopkins University School of Medicine)—Bluebeards Castle Hotel, St. Thomas, V.I. *Credit:* 14 hours AMA Category 1.

For information contact: Peter A. Curreri, M.D., Third Annual Clinical Conference, Box 39, Red Hook, St. Thomas, V.I. 00801.

AMERICAN COLLEGE OF PHYSICIANS

A comprehensive schedule of continuing medical education activities for a 12-month period beginning in August, 1977, includes regional meetings and postgraduate courses to be held at various locations throughout the United States and Canada.

The ACP Regional Meetings, lasting one to four days, are designed for practicing internists and physicians in related fields. They bring new developments in the basic sciences and clinical medicine from major research centers to internists who are unable to travel to medical meetings outside of their state, and also provide a vehicle for local physicians to report to their colleagues on investigative work and clinical experiences in the wide scope of subject areas included in the practice of internal medicine.

The ACP Postgraduate Courses provide the opportunity for in-depth study in fields covered by internal medicine and its subspecialties. Averaging three to five days, they are directed toward practicing physicians and are presented in association with medical schools and other teaching institutions.

For information and registration contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, PA 19104.

Regional Meetings

See September 1977 issue for complete 1977-1978 listing

Postgraduate Courses

See September 1977 issue for complete 1977-1978 listing

- Jan. 9-13 Contemporary Internal Medicine—New York
- Jan. 9-13 Workshops in the Pathophysiology, Diagnosis and Treatment of Electrolyte and Acid-Base Disorders—Philadelphia
- Jan. 18-20 Problems in Clinical Endocrinology—Seattle
- Jan. 24-27 Present Concepts in Internal Medicine—San Francisco
- Feb. 27-Mar. 3 4th Stanford-Palo Alto Medical Research Foundation Winter Course in Infectious Diseases at Sun Valley—Sun Valley, Idaho
- Feb. 28-Mar. 2 Clinical Oncology for the General Internist—Denver

ST. FRANCIS HOSPITAL MIAMI BEACH, FLORIDA

Pediatric Dermatology Seminar & Cruise

- Feb. 23-26 Pediatric Dermatology Seminar—Konover Hotel, Miami Beach. *Credit:* 12 hours AMA Category 1 and AAD, AAFP prescribed. *Fee:* physicians, \$150; in training, \$100.
- Feb. 26-March 5 Post Convention Flight-Cruise to South America and the Caribbean. *Credit:* 12 hours AMA Category 1 and AAFP, AAD prescribed. *Fee:* \$795.

For information contact: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, N. Miami Beach, FL 33169.

GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

- Jan. 23-26 Clinical Cardiology Conference 1978—Southampton Princess Hotel, Golf, Beach and Tennis Club, Hamilton, Bermuda. *Credit:* 20 hours AMA Category 1 and up to 23 hours AAFP elective. *Fee:* \$250.

For information contact: Office of Continuing Education, Georgetown University School of Medicine, Kober-Cogan Room 412, 3800 Reservoir Road, N.W., Washington, DC 20007.

AMERICAN SOCIETY OF CONTEMPORARY MEDICINE AND SURGERY

Jan. 30- 13th Annual Scientific Assembly—
Feb. 4 Americana Hotel, Miami Beach. *Credit:*
40 hours AMA Category 1.

For information contact: John G. Bellows, M.D.,
Ph.D., Director, 6 N. Michigan Ave., Chicago, IL
60602, Tel. (312) 236-4673.

AMERICAN THORACIC SOCIETY OF LOUISIANA

Jan. 23-27 3rd Annual New Orleans International
"Mardi Gras" SUPERCOURSE(c) on
lung disease—Braniff Place Hotel, New
Orleans. *Credit:* AMA Category 1 and
AAFP. *Fee:* \$185.

Jan. 23-27 10th Annual National "Respiratory Dis-
ease Care Course" [in conjunction with
SUPERCOURSE(c)]

Jan. 24-27 14th Annual International "Pulmonary
Function in Health and Disease Course"
[in conjunction with SUPERCOURSE
(c)]

Jan. 24-27 7th Annual National "Pediatric Pul-
monary Course" [in conjunction with
SUPERCOURSE(c)]

For information contact: ATS of Louisiana, 333
St. Charles Ave., Suite 500, New Orleans, LA 70130.

BETH ISRAEL HOSPITAL DENVER, COLORADO

See August 1977 issue for listing

Announcing the **41st Annual New Orleans Medical Assembly**

March 31 - April 4, 1978
The Fairmont — New Orleans

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ognition Award, American Academy of Family
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H. Dabezies, Jr., M.D., F.A.C.S., Director of
Program.

Registration Fee: \$200 non-member physicians;
\$100 military; \$100 registered nurses; Com-
plimentary: students, residents, interns and
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Write or Phone: New Orleans Graduate Medical
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Metal Poisoning Possible Cause Of Amyotrophic Lateral Sclerosis

Long-term environmental exposure to selenium may be a cause of amyotrophic lateral sclerosis, says a report in the June 27 issue of *JAMA*. Four male farmer-ranchers in a sparsely populated county in west central South Dakota contracted ALS within a ten-year period. The men, between 57 and 66 years of age, lived within a few miles of each other. All had spent virtually their entire lives in the area. All four died of the fatal degenerative disease.

ALS occurs with an incidence of 1.4 cases per 100,000 population, so the record of four cases in a population of 4,000 indicated to researchers that some environmental factor was present.

The area is very high in selenium in the environment, with sufficient selenium in the soil to produce illness in livestock including an illness of cattle known to ranchers as the "blind staggers." The animal becomes disoriented, weak, and unable to walk without stumbling against objects in its path. Paralysis is seen, the animal is unable to swallow, and death ensues from respiratory failure. The chronic intoxication of selenium poisoning had been noted in animals in the South Dakota area as far back as 40 years ago.

The course of the human disease of amyotrophic lateral sclerosis is similar to the "blind staggers" in cattle.

New Asthma Drugs Aid Sufferers

Asthma sufferers in the United States are finally benefiting this fall from two important new drugs that have been available in Britain for many years.

After three months of receiving beclomethasone dipropionate, 30 patients with chronic bronchial asthma whose condition was so severe that it required corticosteroid therapy with prednisone were able to discontinue the prednisone. After six months, adrenal function improved and steroid toxic reactions decreased. The drug, given as an aerosol, was generally well tolerated and effective. Beclomethasone dipropionate has been available in Great Britain since 1973, but only recently was released for use in the United States.

The other new product, cromolyn sodium, has been marketed throughout the world since 1968, but only recently has become available in the United States. Cromolyn sodium is a unique and effective antiasthmatic agent, and its continuous use will benefit a large proportion of asthmatic patients. In many it will be most effective when administered with other standard drugs.

Americans Satisfied With Health Care, Gallup Poll Says

A Gallup survey indicated most Americans are well satisfied with the quality of their health care. The American people as a whole rate the quality of their health care quite high, the survey found. Even some groups often thought to be deprived—the elderly and rural residents—believe they receive high quality health care and are well satisfied with it.

The survey also found that the public isn't worried about financing the usual cost of health care, mostly through health insurance. Over half even feel they could meet the costs of a major, long-term illness.

Another survey question revealed that public support for national health insurance varies directly in relation to the public's understanding of how much such a program would cost. Those who think it would be "free," (i.e., paid for by the government) favor NHI. Those who understand that taxes would be increased to pay for the program are much less enthusiastic.

Asked to rate the quality of health care received by people like themselves, the public strongly responds "excellent," the survey found. At the same time when asked to assess the quality of health care for other population groups, the public thinks low income people, older people, and people living in rural areas do not get good care. But the older people and the rural people themselves rate their health care as about the same as the average citizen.

Public satisfaction with the last visit to a medical doctor is extremely high—90%. Most were well satisfied with treatment by the doctor's staff; with the waiting time it took to obtain an appointment; with the care received. Almost eight in ten were pleased with the doctor's explanation of their illness.

Some 69% of the public feel confident in their ability to pay the usual costs of health care. A smaller majority, 51% are confident they could finance a major illness.

Some 67% of the public feels there is a need for NHI. But this figure drops to 40% when the question is expanded to include the added taxes to finance such a program. Those most confident in their ability to pay for their health care see little need for a government program. Among those who feel NHI will cost more than their current private health insurance there is little support for a federal program.

And finally, the public is well aware that NHI is not a panacea for problems of health care delivery. At least half foresee an increase in the amount of time they would have to wait to obtain an appointment. About half feel there would be an increase in unnecessary visits to the doctor under NHI.

The public is undecided as to how best to pay for NHI and who should administer the program. Some favor paying through taxes, others through insurance premiums. There is no consensus on who

should run such a program, government or private insurance.

Red Blood Cells Preferred To Whole Blood in Transfusions

Indiscriminate use of whole blood transfusions is discouraged in the newly revised edition of *General Principles of Blood Transfusion*, the AMA's manual on blood for the practicing physician. The risk to the patient from transfusion is reduced considerably when only the red blood cells rather than whole blood is administered, the AMA manual points out. Use of only the red cells reduces the incidence of circulatory overload, the most common cause of transfusion injury.

Kenneth W. Sell, M.D., chairman of the former AMA Committee on Transfusion and Transplantation, points out that blood banks now provide the various components of blood that have already been separated in the laboratory—red cells, platelets, white cells, and plasma. The physician may select only those components that the patient needs, and thus avoid giving whole blood much of the time.

Every blood transfusion carries an element of risk of hepatitis and other diseases in addition to the danger of incompatibility that can be disastrous for an individual patient. As with a drug with known side effects, the physician must weigh the potential danger against the expected benefit before ordering a transfusion. A blood transfusion should never be ordered or given unless it is worth the risk.

Copies of the book (request publication OP 267) may be ordered from the AMA, 535 N. Dearborn St. Chicago, IL 60610. Price of individual copies is \$3.

AMA Releases Study of Jail Inmate Health

Inmates in the nation's jails exhibit an alarming incidence of communicable diseases, according to an inmate patient profile completed by the AMA. Examination of 641 prisoners in the AMA's jail health care project revealed that 12.9% had positive test results for tuberculosis, 5.9% had positive results for syphilis, and 30% had results indicative of liver malfunction, pointing to the possibility of hepatitis.

This high incidence of disease is especially disturbing because of the overcrowding common to U.S. jails. Since many inmates are released within a short time of apprehension, their exposure to disease endangers the general population.

The inmate patient profile, which defines the problem for the first time, is an essential part of the AMA program to upgrade the medical care provided in American jails. The program, funded by the Law Enforcement Assistance Administration, has already produced a preliminary standard of

medical care which is being implemented in the 30 jails participating in the AMA program.

The AMA data show that 90% of the inmates surveyed had at least one medical complaint and in 60.9% of those cases recommendations were made by the examining health professional that follow-up care was necessary.

The need for the AMA project has been underscored by the number of lawsuits by inmates which cite the lack of medical care as evidence of cruel and inhuman punishment. Less than 50% of the jails originally surveyed by the AMA in 1972 provided a regular sick call, and only 17% held sick call on a daily basis. Of those jails surveyed, 27% had no emergency equipment at all, and 6% did not even have a first aid kit.

Unlike the federal system of penal institutions, U.S. jails have been inadequate, medically, for years. The legal need for upgrading the nation's jails has been spelled out by three booklets produced by the AMA jail project. One, *Constitutional Issues of the Prisoners' Right to Health Care*, documents the constitutional right of a prisoner to adequate medical treatment. Another, *Legal Obligations to the Pre-Trial Detainee*, explores the rights of pretrial detainees who must be given all due-process rights as nonprisoners, and who must have their health and well-being provided for and must, in fact, be accorded all the rights of a citizen. A third, *Allied Health Personnel in Jails*, reviews the involvement of nonmedical jail personnel in the delivery of medical care. These people can impede the delivery of health care, such as a guard deciding that a prisoner is malingering and not calling a physician.

The need for improvement of medical care, goes beyond the legal niceties. When a society removes the right of a person to be self-sufficient, then it must provide him with the basics of life.

Surgery Without Transfusions Is Proved Safe

Cardiovascular operations can be performed safely without blood transfusions, says a report by Texas M.D.s David A. Ott and Denton A. Cooley. They report on a 20-year experience of surgery performed on 542 Jehovah's Witness patients, who refuse blood transfusions for religious reasons. Early mortality rate was 9.4%.

Only three of the 51 deaths were related directly to loss of blood. Postoperative anemia was a contributing factor in 12 other deaths. The other deaths were from causes not related to loss of blood.

Patients who refuse blood transfusion for religious reasons can undergo major cardiovascular operations with an acceptably low risk. The surgeon who agrees to treat Jehovah's Witnesses should respect their religious beliefs or refer them elsewhere. To our knowledge, no claims have been made against a physician for failing to administer blood to a Jehovah's Witness.

Independence For Older Persons Urged by AMA

The AMA has called for a national policy toward the aged that will keep them out of institutions as long as possible, keep them working and contributing to society, and maximize their continued independence.

The medical profession strongly encourages the development of expanded home health care services, including both the strictly health-care segments of that program and the more general homemakers' and meals-on-wheels type of service. Physicians would recommend use of services for their patients if adequate services were available. It is a myth that the aged are, as a group, fragile, isolated and despairing, and are merely waiting the inevitable.

Only 12% of older people complain of loneliness, only 7% feel unneeded, and only 6% believe they do not have adequate activities to fulfill their lives. Physical health is better than generally believed. They generally function with reasonable independence in the community. Eighty-two percent have no limitation in their mobility and 5% are confined to the home.

Medicare provides billions of dollars in hospital care for the aged, both needy and non-needy, and pays for physicians' services, limited home health care, and nursing home care. Yet most older persons need only a *little* help—assistance in personal shopping or someone to prepare an occasional hot meal—and these small needs are sometimes the hardest to meet.

Clinical Center Study of Patients With Non-Hodgkin's Lymphomas

The cooperation of physicians is requested in the referral of patients with non-Hodgkin's lymphomas for studies being conducted by the Medicine Branch, National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients with all stages and all histologies are eligible provided they have not received prior radiotherapy or chemotherapy, are less than 65 years of age, and have no other major illnesses. Patients who appear to have localized (Stage I or II) diffuse histiocytic lymphoma are also eligible.

Pathology reports, blocks, and slides must be forwarded with the patient for review.

Physicians interested in further details and in having their patients considered for admission may write or telephone: Attending Physician, Medicine Branch, NCI, Bldg. 10, Room 12N226, Bethesda, MD 20014; Tel. (301) 496-4916.

Clinical Center Study of Patients with Primary Pulmonary Hypertension

The cooperation of physicians is requested in the

referral of patients with primary pulmonary hypertension for studies being conducted by the Cardiology Branch of the National Heart, Lung, and Blood Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

We are seeking patients, 18 years of age or older, who are relatively early in the course of their disease (i.e., prior to the onset of clinical right-heart failure). Patients will undergo a complete cardiopulmonary evaluation including right-heart catheterization to confirm the diagnosis and assess the efficacy of several potential therapeutic agents on pulmonary vascular resistance and pressure. Agents that appear effective in the laboratory will be further evaluated by testing the patients' exercise performance during oral administration of the drug. A complete summary of the workup findings and our recommendations will be sent to the referring physician.

Interested physicians may write or telephone: Stuart F. Seides, M.D., Cardiology Branch, National Heart, Lung and Blood Institute, Clinical Center, Room 7B-15, NIH, Bethesda, MD 20014; Tel. (301) 496-5817.

Clinical Center Study of Patients with Undiagnosed Chronic Intrahepatic Cholestasis

The cooperation of physicians is requested in the referral of patients with undiagnosed chronic intrahepatic cholestasis for studies being conducted by the Liver Unit of the National Institute of Arthritis, Metabolism, and Digestive Diseases at the Clinical Center, National Institutes of Health, Bethesda, Md.

Selected patients, over 4 years of age, will be admitted for detailed evaluation and treatment. Physicians interested in further details or in having their patients considered for admission may write or telephone: E. Anthony Jones, M.D., Liver Unit, Bldg. 10, Room 4D-52, NIH, Bethesda, MD 20014; Tel. (301) 496-1721.

Clinical Center Study of Patients with Chronic Active Hepatitis and Primary Biliary Cirrhosis

The cooperation of physicians is requested in the referral of patients for studies of chronic active hepatitis and primary biliary cirrhosis being undertaken at the National Institutes of Health, Clinical Center, Bethesda, Md., by the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Needed are untreated patients whose sera may be either positive or negative for hepatitis B surface antigen. All patients accepted for study will be ad-

mitted to the Clinical Center where they will undergo a detailed evaluation of their condition and be started on appropriate treatment. Duration of the admission is expected to be about three weeks.

Physicians interested in further details or in having their patients considered for admission may write or telephone: E. Anthony Jones, M.D., Clinical Center, Room 4D-52, NIH, Bethesda, MD 20014; Tel. (301) 496-1722.

Clinical Center Study of Patients With Premature Coronary Artery Disease

The cooperation of physicians is requested in the referral of patients with premature coronary artery disease for studies being conducted by the Cardiology Branch of the National Heart, Lung, and Blood Institute at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients under 65 years of age with angina pectoris or a history of myocardial infarction are sought for a prospective natural history study to determine whether high-risk and low-risk subgroups can be identified. Of particular interest are patients under 45 years of age who have no known risk factors. Study techniques will include exercise testing with radionuclide cineangiography, 24-hour ECG tapes, clinical evaluation, and coronary arteriography. Additional screening studies will also be carried out for multiple genetic and metabolic risk factors predisposing to the early development of atherosclerosis. A complete summary of the workup findings and recommendations will be sent to the referring physician.

Physicians interested in further details or in having their patients considered for admission may write or telephone: Robert M. Stark, M.D., or Kenneth M. Kent, M.D., Ph.D., Cardiology Branch, National Heart, Lung, and Blood Institute, Bldg. 10, Room 7B-15, Bethesda, MD 20014; Tel. (301) 496-5817.

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A 245-bed hospital is seeking a board certified or eligible physician to cover excess demands on OB/GYN services. Located 45 miles south of Nashville, the hospital serves as a regional medical center for a seven-county area. Excellent opportunity to join an active, well-established, two-man practice or to go solo, if preferred, in a pretty area of Tennessee. Contact: William R. Walter, Administrator, Maury County Hospital, Columbia, TN 38401.

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OPHTHALMOLOGIST—age 31, graduate of Sawai Man Singh Medical College (India) in 1969—desires associate or solo practice. Board eligible, ophthalmology. Married. Available within short period after agreement. LW-1250

PEDIATRICIAN—age 34, graduate of Rangaraya Medical College (India) in 1967—desires practice in Tennessee city with 10,000+ pop. Board eligible, pediatrics. Married. Available July, 1978. LW-1287

ORTHOPEDIC SURGEON—age 32, graduate of University of Virginia in 1971—desires associate or clinical practice in East Tennessee city with 50,000+ pop. Presently completing residency. Married. Available July, 1979. LW-1288

GENERAL SURGEON—age 38, graduate of Creighton University School of Medicine in 1966—desires associate or clinical practice in Tennessee city with 50,000+ pop. Board certified, family practice. Married. Available July, 1978. LW-1289

OPHTHALMOLOGIST—age 33, graduate of Vanderbilt University School of Medicine in 1970—desires associate practice in Tennessee. Board eligible, ophthalmology. Married. Available September, 1978. LW-1290

INTERNIST—age 28, graduate of University of Texas College of Medicine, Galveston in 1974—desires group practice in medium-sized Tennessee city. Board eligible, internal medicine. Married. Available January, 1979. LW-1291

PEDIATRICIAN—age 31, graduate of New York University in 1972—desires assistant, associate, clinical or institutional practice in large East Tennessee city. Board certified, pediatrics. Presently completing military service. Married. Available August, 1978. LW-1292

NEUROSURGEON—age 32, graduate of University of Sydney College of Medicine (Australia) in 1969—desires clinical practice in Tennessee city with 200,000+ pop. Married. Available April, 1979. LW-1293

INTERNIST—age 29, graduate of Emory University School of Medicine in 1974—desires associate practice in East or Middle Tennessee city with 20,000+ pop. Board certified, internal medicine. Married. Available July, 1978. LW-1294

UROLOGIST—age 31, graduate of University of the Philippines in 1971—desires solo, associate or group practice in Tennessee city with 20,000+ pop. Married. Available July, 1978. LW-1295

PEDIATRICIAN—age 32, graduate of Medical College of Kerala (India) in 1967—desires solo practice in Tennessee city with 20,000+ pop. Board eligible, pediatrics. Married. Available July, 1978. LW-1296

RADIOLOGIST—age 32, graduate of Damascus University (Syria) in 1971—desires associate or solo practice in Tennessee. Board eligible, general radiology. Married. Available July, 1978. LW-1297

OPHTHALMOLOGIST—age 47, graduate of University of Tennessee College of Medicine in 1957—desires clinical, associate or solo practice in Tennessee city with 25,000+ pop., preferably in Middle Tennessee. Board certified, ophthalmology. Married. Available July, 1978. LW-1298

RADIOLOGIST—age 32, graduate of University of Missouri College of Medicine in 1971—desires associate or solo practice in Tennessee. Presently completing residency. Married. Available July, 1978. LW-1299

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ORTHOPEDIC SURGEON—needed to join orthopedist in Clarksville, a Middle Tennessee city with 50,000+ total city and county pop. 200-bed hospital in area. Young medical staff with high percentage of specialists. Fastest growing city in Tennessee. Unlimited recreational facilities. PW-486

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Metairie, LA
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Saltville, VA
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D. H. McConnell
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Ralph Brickell, Jr.
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Russell W. Mayfield

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A. N. Williams, Jr.

Bolivar
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Harvey H. Barham
Robert Dunavant
Charles L. Frost

Brownsville
Bobby D. Hale
Herbert Parsons
David E. Stewart
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Jerald White

Camden
Alvin T. Hicks
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Friendship
Lamar A. White

Grand Junction
N. H. Edwards

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Darrell King
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J. H. Crenshaw
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James Barker
Jim Barnes
Glen Barnett
Robert J. Barnett
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Jack H. Booth
Jane W. Brown
Joe L. Brown
William F. Burnett
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Edwin W. Edwards
Thomas Ellis
Blanche S. Emerson
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Bruce E. Herron
Charles B. Herron
Bobby Higgs
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Jerry Hornsby
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Leland M. Johnston
Chester Jones
John A. Kendall
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Whiteville
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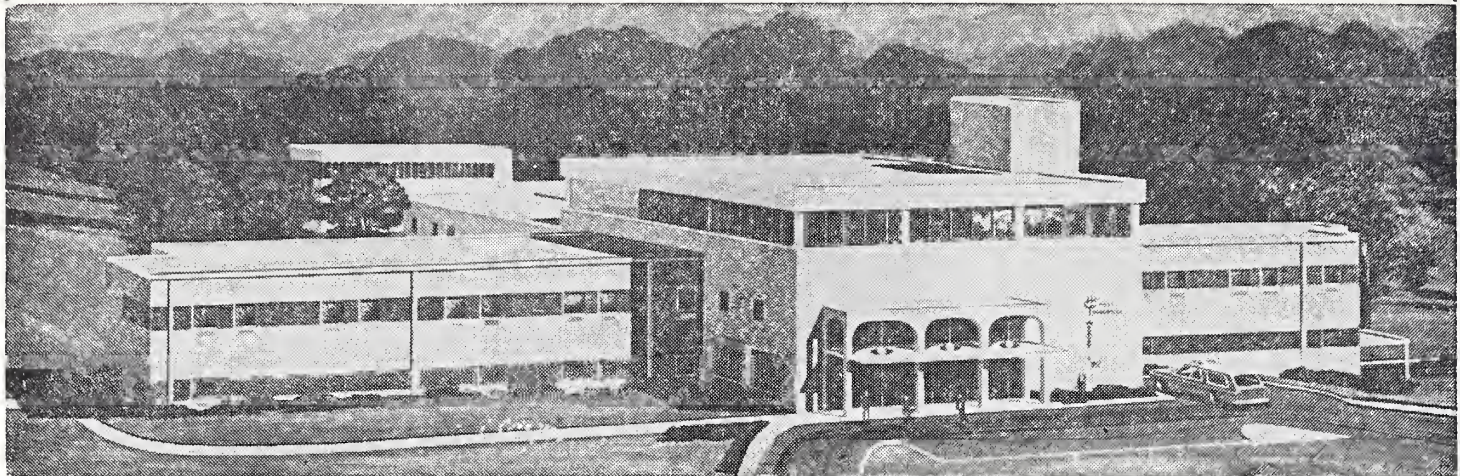
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